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WORLD
in
ARMS

WORLD IN ARMS

A Study in Military Geography

By

R. ERNEST DUPUY

Major, United States Army



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TO MY SON

TREVOR N. DUPUY, U.S.M.A. 1938

for a number of reasons

well known to him

Foreword

Military geography is the study of physical geographic features in connection with definite operations. Armies—and navies too—follow the paths of least resistance to attain their designated objectives, which are, in the last resort, imposition of the national will upon the other fellow. In this world of to-day, when wars and rumours of wars fill the daily press, when obscure pinpoints of land suddenly spring into headline prominence as military or political objectives, the average reader is frequently hard put to realize the significance of such moves. Only when analyzed in the light of military geography do they become clear. For such purpose this book is written.

The study is that of an individual. Neither it nor its sources may be taken as official War Department opinion, nor necessarily that of the services at large.

In the case of belligerent countries the figures given are those available at the outbreak of war, in September, 1939, and do not, of course, show either the losses sustained since then or the additions in men, guns, planes, ships, etc., that have been or are being made.

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Introduction

The following sketch maps show but the greater geographic features of the areas presented—canalizing the terrain, forming either barriers to or channels facilitating major military operations. On land these natural features are definite parts of the problem confronting a commander of ground troops, and to a great extent must also be considered by directors of aerial forces. On the water the sea lanes are restricted only where they pass between natural defiles. These maritime passes must be reckoned with in determining the objectives of sea power. Last but not least, on both land and sea, the art of war embraces the artificial elaboration, suppression or evasion of these natural features, to facilitate defence on the one hand, invasion on the other.

The data sheets facing each map represent in much simplification the available military force of each nation concerned. The yardstick of presentation is that of fighting power. On land it is the division, made up of infantry, supported by field artillery and a proportion of other arms—the basic self-supporting unit of grand tactics. In the air the squadron is the fighting unit, and the bomber is the basic offensive type. On the sea the battleship is the unit of sea power—all other vessels are auxiliary to the ship of the line.

Man power alone is a most unsatisfactory and inaccurate yardstick of national fighting power, despite the fact that man is the basic element. Wars are fought by men, not by machines; a fact that civilians are prone to forget. Men run machines. But unless man be implemented with weapons he cannot wage war against other men properly armed, again a fact often skipped by those unacquainted with the military art.

Finally, wars are initiated with the implements on hand. It takes eighteen months to build one anti-aircraft battery with all its vital impedimenta. It takes nearly three

years to build one battleship. It takes no longer to build a hundred of either, given the resources, equipment and skilled workers. The point is that they cannot be produced out of a hat by waving a wand. So in estimating national armed forces one can use but a single accurate yardstick—organizations of men and material to-day trained and prepared to fight.

The normal divisional formation in the armies of most nations to-day is triangular—three regiments (or equivalent, amounting to nine battalions) of infantry, with a groupment of light artillery for direct support. Elements of horse cavalry and armoured cars, engineers, signal, medical and supply troops are also included. Divisional strengths vary slightly, with 16,000 as a mean. Exceptions to this formation to-day are Great Britain (twelve battalions of infantry organized in three brigades), the United States (twelve large battalions of infantry in four regiments—two brigades, supported by a three-regiment field artillery brigade) and Japan (with practically the same infantry strength as the U.S. and slightly less artillery strength). The United States is to-day experimenting with a three infantry regiment division supported by a field artillery groupment, but in fact its normal war strength formation is still its World War division, some 25,000 officers and men.

All manoeuvrable fighting formations—on land, air and sea—are compromises between two diametrically opposed forces, fire-power and mobility, with each nation working out its own concept of compromise."

Bombing Time-Range Tables.

The burning question to-day, as eyes and ears are strained for the droning death from the air, is "How soon can they reach us?" The bombing time-range tables herein included give the answer. Distances are taken

from nearest known air base in territory of potential attacker. Calculations are made at the rate of 250 m.p.h., a reasonable speed for modern bombers, and time is taken to the nearest whole minute. The objective is to give the reader a comprehensive idea of the air vulnerability of the capital city and a few key points in each nation considered. It should be remembered that for mass aerial movements air units take off from one or more dromes at such time as to rendezvous over some given point, then proceed on mission.

Air Line Bombing Radius :

500 miles, normal.
500—1000 miles, abnormal but possible in exceptional circumstances.

Radius of action for each type of fighting ship is calculated by halving the normal extreme cruising range with full load, less an appreciable fuel-consumption time allowance for necessary manoeuvring. Military airplanes are valuable material, not to be squandered for trivial reasons. They are, therefore, normally sent only on missions from which—hostile attack and destruction always excepted—they may be expected to return.

The Spanish civil war has shown the tactical value of shuttling between two different bases, as opposed to a round-trip mission from any one base. This must be taken into account in any European war where allied nations might well be expected under certain conditions to shuttle their long-distance bomber missions between their respective bases, thus increasing if necessary their bombing radius of action at the same time decreasing the number of air-hours of operation and the fuel consumption; important factors.

Average Modern Air Speeds.

Bomber	..... 250 m.p.h.
Fighter	..... 300 m.p.h.*
Reconnaissance	.... 250 m.p.h.
Transport	..... 100 m.p.h.

Anti-aircraft Warning Intelligence Nets.

Each nation has some machinery set up—including both regulars and home-guard units—to provide the necessary warning of approach of enemy aircraft. These systems are in addition to the normal reconnaissance and range-finding elements of anti-aircraft artillery and provide an essential link in the functioning of the air army, the anti-aircraft artillery, and the air raid precaution units organized to fight fire, gas and demolition.

World in Arms.

This book does not pretend to take the place of an atlas, which is indispensable for further detailed study.

In weighing the possibilities of attack upon any given nation the following basic considerations should be taken into account :

a. Nation menaced.

- (1) Characteristics of physical geography favouring or impeding invasion
- (2) Defensive resources.





















b. Menacing nation.

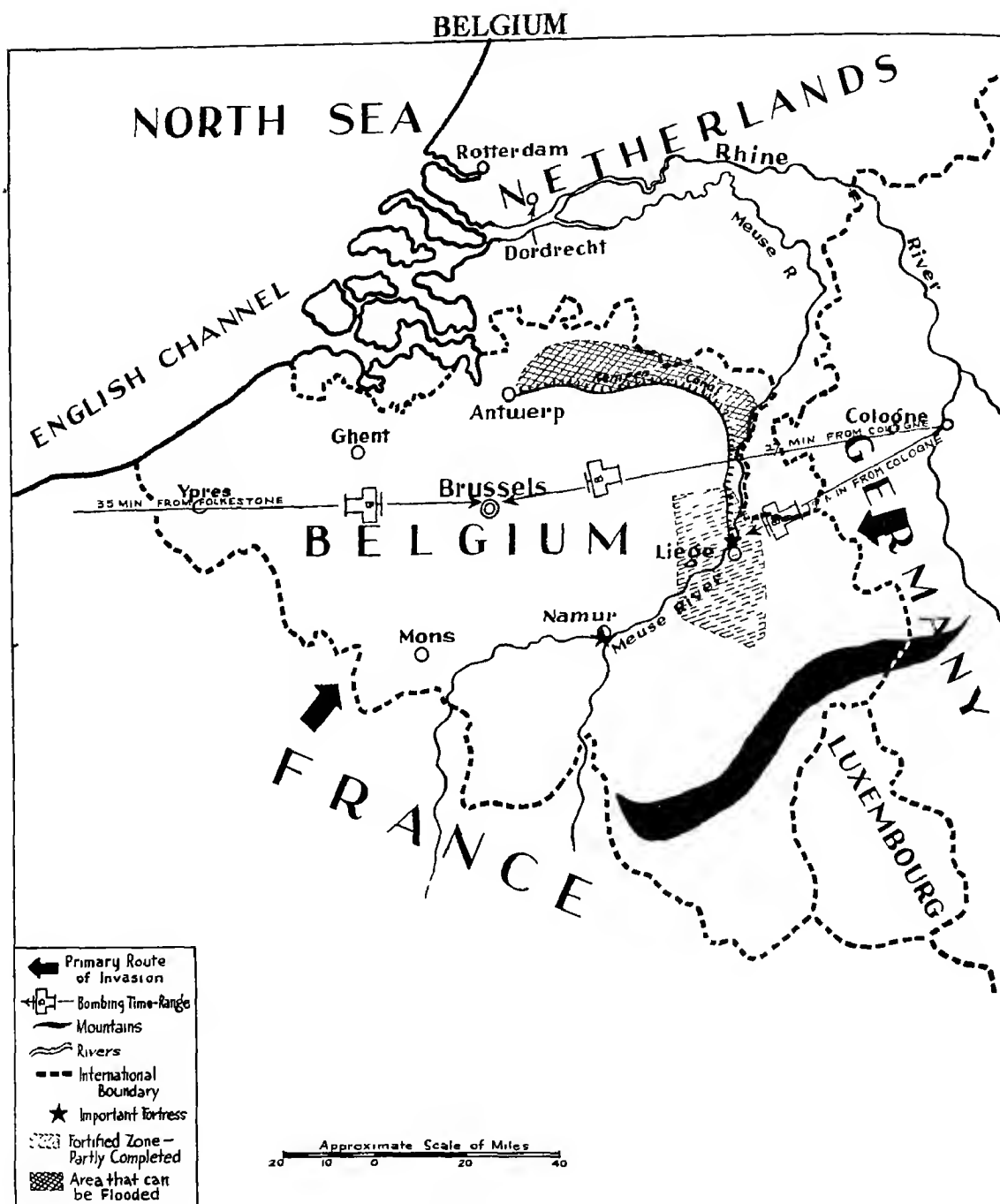
- (1) Possibilities favouring an air thrust.
- (2) Ground troops (and navy, where pertinent), available for (a) invasion, and (b) protection of own vital terrain against counter-attack by air, land and sea.

Wars, in the last resort, are won by ground troops physically occupying terrain, assisted by sea power (where pertinent). The air arm, indispensable in modern operations, is but one member of the combat team.

*The leading fighter types at present in use by Britain, France and Germany—Spitfire, Curtiss, and Messerschmitt—operate at higher average speeds, approximately 350 m.p.h.

Key to Symbols

		Division—tactical mobile fighting unit of all arms
		Cavalry Division
Army		Artillery Unit
		Antiaircraft Artillery Unit
		Fortress Troops
		Mechanized Division
<hr/>		
		1st Class Fortress
		Fortified Zone
Geographical		Fortified Zone under construction
		Primary Route of Invasion
		Secondary Route of Invasion
<hr/>		
		Squadron (B)—Bomber
Air		(F)—Fighter-pursuit and attack
		(O)—Obsn.-training, transport
<hr/>		
		Battleship
		Heavy Cruiser
Navy		Light Cruiser
		Submarine
		Plane Carrier
		Destroyer



BOMBING TIME-RANGE TABLE

Belgium is open to aerial attack from Germany, France, England, Netherlands and carrier-based aviation on the North Sea

To	From	Approximate Mileage	Elapsed Time
Brussels	Cologne (Ger)	110	27 min
	Folkestone	135	33 min
	Bergen o/z (Neth)	45	11 min
	Lille (Fr)	60	15 min
Antwerp	Cologne (Ger)	110	27 min
Liege	Cologne (Ger)	65	17 min
Namur	Cologne (Ger)	95	23 min

Belgium






Army is under Ministry of National Defense; air force is an integral part of Army.

Theory of combat—Initial defense of neutrality, by covering force, awaiting reinforcement of her guarantors against aggressor.




ARMY (Conscript with professional cadres)

a. Regular Army

The nation is divided into four zones.

	6 Divisions	120,000
	2 Cavalry Divisions	10,000
	Fortress Troops (artillery, infantry, engineers, frontier guards, etc.)	25,000
	1 Brigade Army artillery	5,000
	2 Regiments	2,000
	Gendarmerie	6,000

Air Force: Squadrons

	1 Bomber (light)	} 400 ships, all classes
	6 Fighter	
	5 Reconnaissance	

Personnel—(in 6 regiments and 3 separate battalions)—

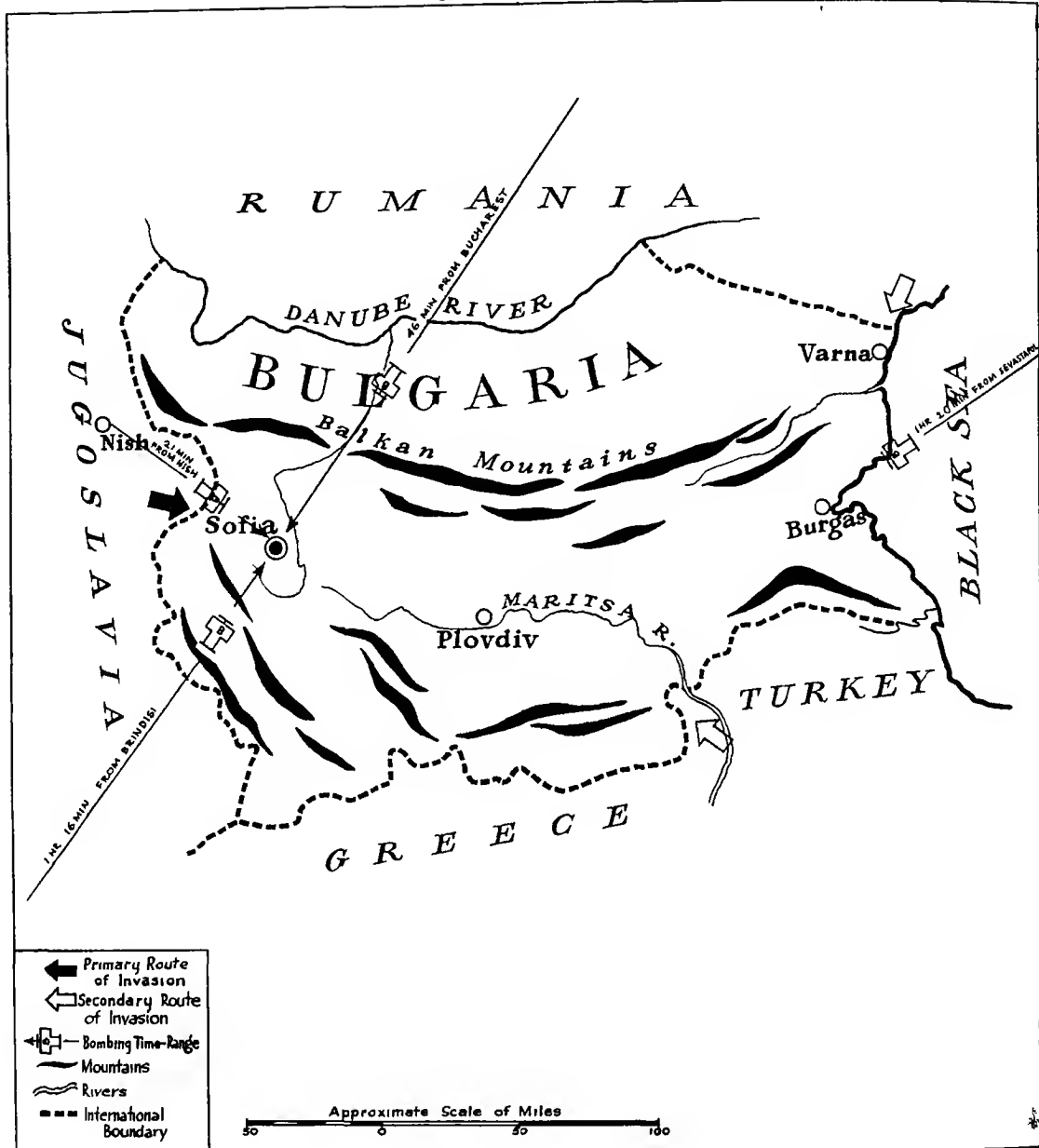
Military Pilots	400
Other ranks	3,000
	<hr/> 3,400

Total war strength of above, mobilizable by M+8 days 171,400
Note—at peace strength the above units, skeletonized, exist at total strength of 66,000

b. Reserves

Civil Guard antiaircraft warning force (strength unknown).
 Total potential trained manpower 790,000

BULGARIA



BOMBING TIME RANGE TABLE

Bulgaria is open to aerial attack from the other Balkan states, Turkey, Russia, Hungary and Italy, and from carrier-based aviation on the Black and Aegean Seas

To	From	Approximate Mileage	Elapsed Time
Sofia	Nish (Jugsl)	85	21 min
	Bucharest (Rum)	190	46 min
	Salonika (Gr)	145	34 min
	Adrianople (T)	170	44 min
	Szeged (Hun)	290	1 hr 10 min
	Brindisi (It)	315	1 hr 16 min
Burgas	Sevastopol (Rus)	330	1 hr 20 min

Bulgaria

Army is now in process of reorganization.

ARMY (Conscript with professional cadres)



10 Divisions



11 Regiments



Fortress Troops

War Strength	120,000
Peace Strength	33,000

NAVY (Entirely negligible)

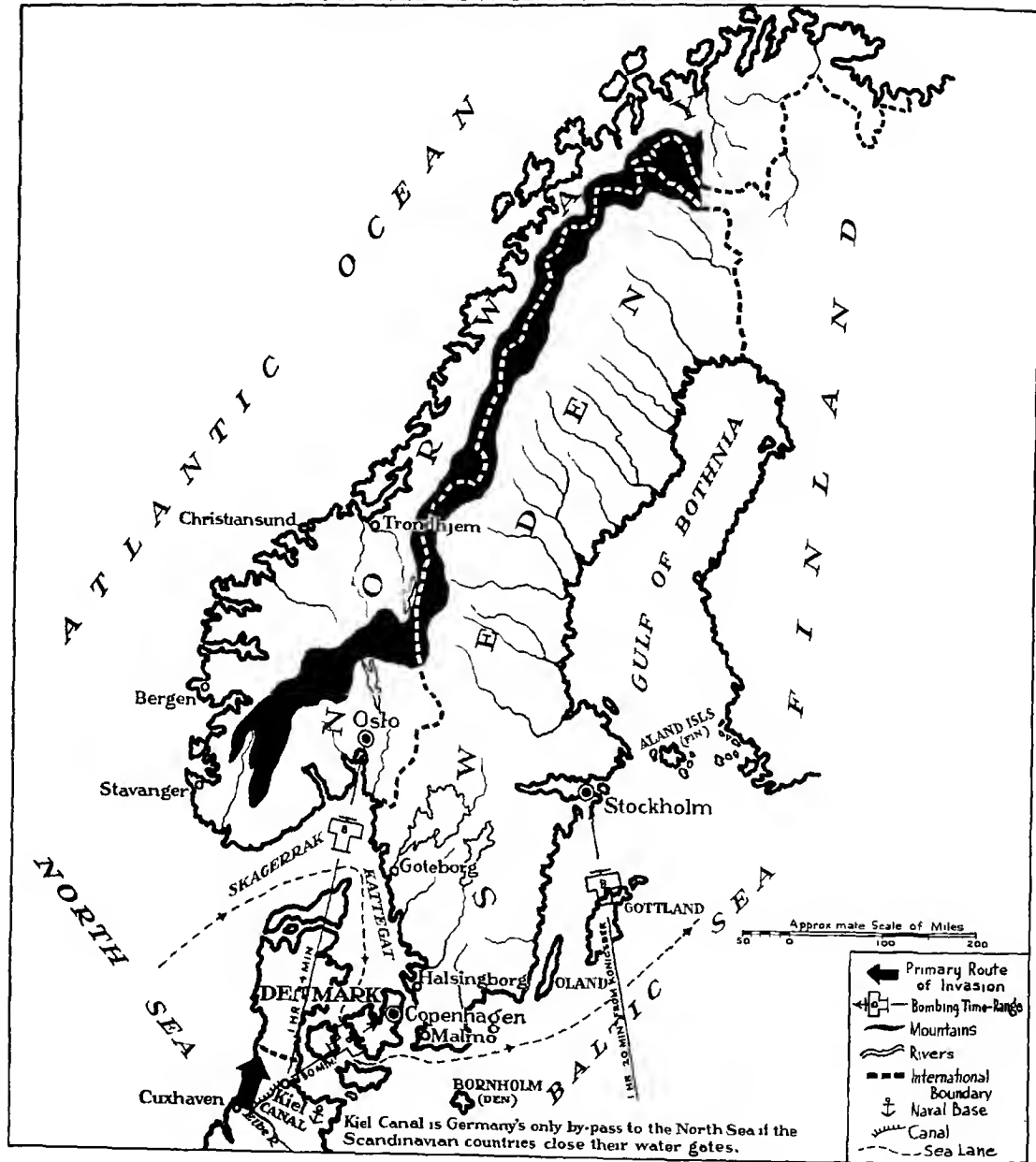
AIR ARMY

Plans extant for reorganization and strengthening, but at present negligible.



All types 70 ships

NORWAY-SWEDEN-DENMARK



BOMBING TIME RANGE TABLE

Denmark is open to aerial attack from the other Scandinavian countries, from Germany, Netherlands, Belgium, Great Britain and from carrier based aviation on North and Baltic Seas

To	From	Mileage Approximate	Elapsed Time
Copenhagen	Kiel (Ger)	135	32 min
	Malmö (Swed)	25	06 min
	Lowestoft (Br)	490	1 hr 58 min
	Haarlem (Neth)	400	1 hr 36 min
	Ostend (Bel)	500	2 hr 00 min
	Libau (Lat)	400	1 hr 36 min
Esbjaerg	(approx. over water)		
	Dunquerque (Fr)	400	1 hr 36 min

Scandinavia

The three nations—Denmark, Sweden and Norway—are allied in a loose linked mutual defense pact, basis of which is neutrality towards the rest of Europe. Denmark, however, is dominated by adjacent Germany and may easily be overrun by her neighbor. Unless Denmark be actively drawn into the Rome-Berlin axis, the

Scandinavian nations hold the key to the Baltic Sea, entrance to which can only be effected through the Skagerrak and Kattegat (except for the Kiel Canal, in German territory). A German controlled Denmark means instead that Germany controls the entrance to the Baltic.

Denmark

Army and Navy are separate entities, with Air Force a part of the Army.

ARMY (National militia, with permanent cadres)



3 Divisions



Fortress Troops

War Strength 161,000

Peace Strength 11,000



Air Force Entirely negligible (approx 90 ships in all)

NAVY



2 Coast defense battleships (antiquated)



1 Cruiser minelayer



20 Torpedo boats



12 Submarines

Norway

Army, Navy and Air Army are consolidated under a single Department of Defense. The defense forces are today being increased.

ARMY (National militia, with permanent cadres)



9 Brigades



1 Battalion



Fortress Troops

War Strength 90,000

Peace Strength 30,000

NAVY



4 Coast defense battleships



8 Destroyers



9 Submarines

Smaller Craft

Note—What there is of the Norwegian navy is a high-seas flotilla.

AIR ARMY



All classes

100 ships

BOMBING TIME RANGE TABLE

Norway is open to aerial attack from Germany, Great Britain, the other Scandinavian countries, the Baltic countries and from carrier based aviation on the North Sea and Atlantic Ocean.

To	From	Approximate Mileage	Elapsed Time
Oslo	Kiel (Ger)	390	1 hr 34 min
	Helsingfors (Fin)	500	2 hr 00 min
	Göteborg (Swed)	155	38 min
Bergen	Peterhead (Br)	320	1 hr. 17 min.

Sweden

The most powerful of the three Scandinavian countries. Army, Navy and Air Army are separate entities, under Ministry of National Defense.

ARMY (National militia, with permanent cadres)



4 Divisions



1 Brigade (approx.) of motorized and partly mechanized units



Fortress troops

War Strength 885,000

Peace Strength 35,000

NAVY



3 Coast defense battleships (pre-war vintage, but entirely reconditioned), and 5 old coast defense ships



2 Light cruisers (1 cruiser-seaplane carrier, and 1 old armored cruiser)



16 Destroyers



16 Submarines



1 Aircraft tender and several other small vessels



Coast Defense artillery, under Navy

AIR ARMY



All classes (including a large proportion of flying boats) .. 250 ships

Gotland is air base. Note its strategic position dominating the Baltic Sea.

BOMBING TIME-RANGE TABLE

Sweden is open to aerial attack from other Scandinavian nations, the Baltic nations, Russia, Germany, and carrier-based aviation on the North and Baltic Seas.

To	From	Approximate Mileage	Elapsed Time
Stockholm	Helsingfors (Fin.)	250 ...	1 hr. 00 min.
	Libau (Lat.)	220	53 min.
	Konigsberg (Ger.)	330	1 hr. 20 min.
Gotland	Kolberg (Ger.)	250	1 hr. 00 min.
Helsingborg	Kiel (Ger.)	160	39 min.

British Empire

See also:— Canada, Australia and New Zealand, India, Irish Free State, Union of South Africa, Egypt.







Great Britain

Army, Navy and Air Army are separate entities, co-ordinated by the Ministry for Coordination of Defense.

Theory of combat: Initial defense followed by counter-blow.





ARMY

a. Regular Army (Pre-war).

	5 Divisions (war strength 100,000 at present in reduced strength)	73,000
	Cavalry—No cavalry divisions (1 cavalry regiment is a component of each regular division)	
	1 Mobile (partly mechanized) Division and 1 Mechanized Brigade	12,000
	Fortress and Coast Defense troops (including artillery, engineers, etc.)	15,000
	Antiaircraft Artillery (75,000) (Mainly from Territorial Army q. v.)	75,000
	Total Regular Army (excluding British Army in India q. v., and overseas garrisons)	175,000
	10 Cooperative Squadrons (attached from Air Army, q. v.)	

b. Territorial Army

The Territorial Army has been entirely reorganized, following a period when most of its existing units had been transferred into antiaircraft artillery—antiaircraft defense is a responsibility of the Army.

	12 Divisions (of which 3 are motorized)	200,000
	2 Cavalry Brigades	5,000
	2 Mechanized Divisions	10,000
	5 Divisions (mobile and fixed antiaircraft defense; the home country being divided into five areas:—	
	1st, London (includes 5 balloon barrage squadrons)	(70,000)
	2d, Eastern-Northern	(included in Regular Army tabulation)
	3d, Scotland	
	4th, Western	
	5th, Southern	

(Note—this Territorial antiaircraft

defense force is prepared for mobilization on M-Day, with immediate incorporation in Regular army, q. v.)



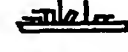
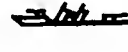


Total Territorial Army (less A. A.) 215,000

(Note—The above figures represent the strength of the Regular and Territorial armies before conscription, and before the declaration of war. Details of the exact number of men called to the colours is not available, and in any case is constantly changing.)

NAVY


(Includes all fighting ships of the Empire)

Modern ships in commission or nearing completion; vessels projected or just laid down are not counted.

	15 Battleships (includes 3 battle-cruisers not rated as able to lie in the line)
	17 Heavy Cruisers
	42 Light Cruisers
	158 Destroyers
	54 Submarines
	6 Plane Carriers (and 1 airplane tender)

Personnel	Active	Reserve	Total
Great Britain ..	115,000	60,000	175,000
Australia	4,200	5,000	9,200
New Zealand ..	.....	1,200	1,200
Canada	950	1,200	2,150
India	1,500	.....	1,500
Total	121,650	67,400	189,050




Fleet Air Arm

	Carrier-based and patrol planes (flying boats) attached from Air Army q. v., but under naval command. (All classes)	450 ships
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AIR ARMY

(Royal Air Force)

Organized in 240 squadrons, now in process of re-organization (no better data available)

	Bombers	800 ships
	Combat	2,100 ships
	Reconnaissance (including transport, etc.)	400 ships

Total first line operating ships 3,300 ships

(Continued on page 23)

Map of the British Isles and surrounding regions, showing bombing time ranges from various locations. The map includes the Atlantic Ocean, North Sea, English Channel, and parts of France, Ireland, and the British Isles. Key locations marked include Orkney Is., Shetland Is., Hebrides Is., Aberdeen, Rosyth, Edinburgh, Glasgow, London, Manchester, Liverpool, Dublin, Belfast, Cardiff, Portsmouth, Devonport, Le Havre, and Paris. Bombing time ranges are indicated by lines with arrows and labels such as "1 HR. 05 MIN FROM FAROE IS.", "2 HR 27 MIN FROM NIEL", "1 HR 56 MIN FROM WILHELMENHAVEN", "1 HR 15 MIN FROM COLOGNE", and "33 MIN". A legend in the bottom left corner defines symbols for Bombing Time-Range, Mountains, Rivers, Boundary Lines, and Naval Base. An approximate scale of miles is provided at the bottom left.

England, Scotland and Ireland are open to aerial attack from Germany, France, Belgium, Holland, the Scandinavian countries, the Faeroe Islands and Iceland, and by flying boat or carrier based planes in the North Sea. The danger is increased by the possibility of flying boat and submarine bases being established on the west coast of the Irish Free State or in the Hebrides, facilitating shuttle operations to a limited extent.

To	From	Approximate Mileage	Elapsed Time	To	From	Approximate Mileage	Time
London	Wilhelmshaven (Ger)	365	1 hr 28 min	Dingle Bay			
	Cologne (Ger)	310	1 hr 15 min	(s w coast			
Scapa Flow	Kiel (Ger)	610	2 hrs 27 min	of Irish Free			
	Fieroe Isl (Den)	270	1 hr 05 min	Statç)	Kiel (Ger)	850 *	3 hrs 24 min
Edinburgh	Wilhelmshaven (Ger)	480	1 hr 56 min				
Liverpool	Wilhelmshaven (Ger)	450	1 hr 48 min				
	Cologne (Ger)	450	1 hr 48 min				
				London	Paris (Fr)	220	53 min.

22

Great Britain (Continued)

Reserve—all types, including planes more than 3 years old, many obsolescent . . 3,800 ships

Total operating ships 7,100 ships

Note—the Royal Air Force figures above include cooperative squadrons with Army, the Fleet Air Arm, and 7 overseas commands—Middle East, Iraq, Aden, Palestine and Transjordan, India, Far East and Mediterranean.

Personnel

Military Pilots 5,000
Other ranks 83,000

Total 88,000

(*Note*—The figures given both of machines and personnel represent pre-war strength. The figures of both are constantly changing and enormously increased.)






Eire

Irish Free State





Eire is an element in the British Commonwealth of Nations. Its military forces are volunteer, and it is not included in Great Britain's present conscription act, although Northern Ireland is.

ARMY

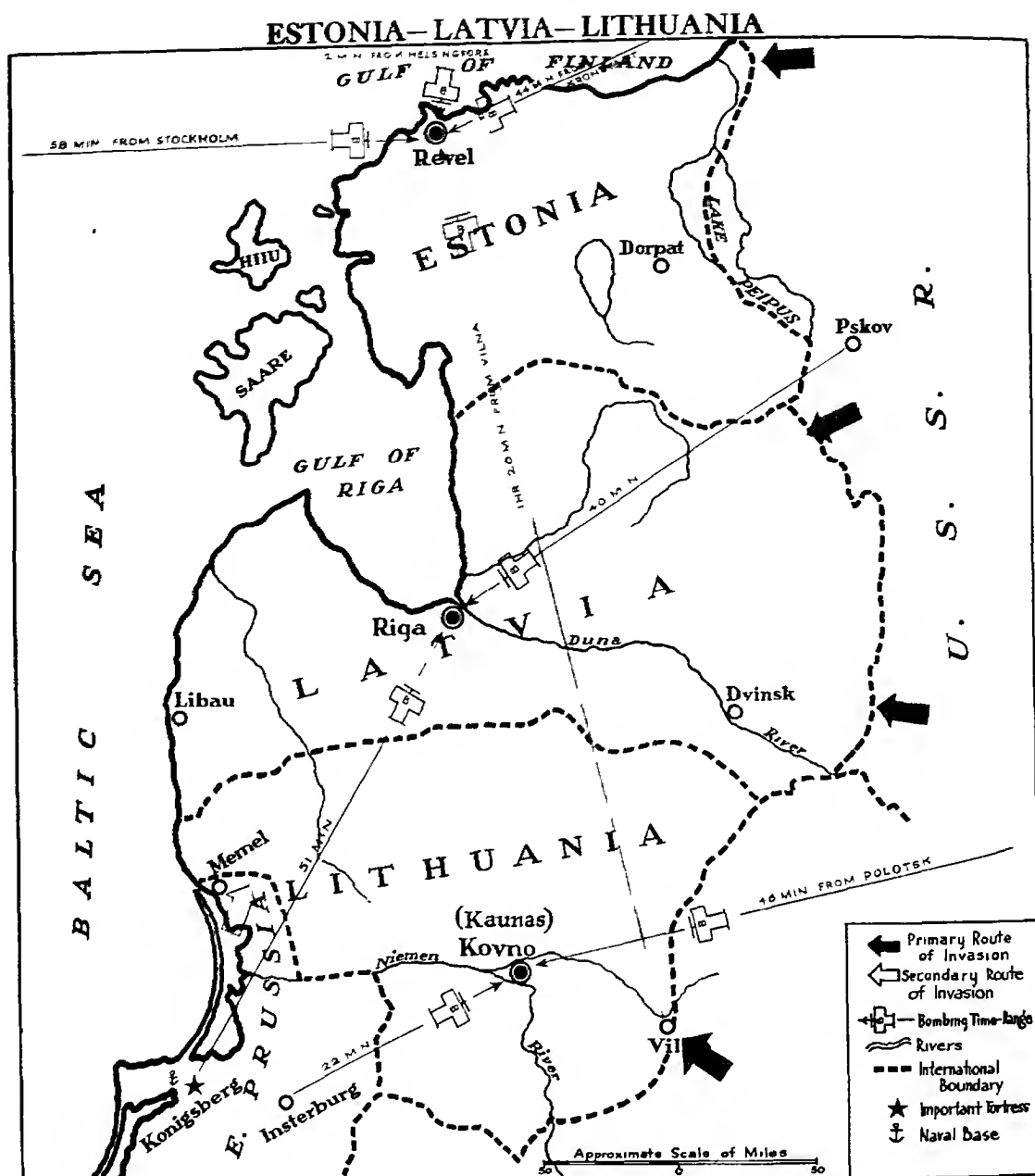
a. Permanent Force

	1 Regiment	}	7,000
	1 Field Artillery Brigade		
	1 Antiaircraft Arty. Brigade		
	1 Cooperative Squadron, 16 ships		
	5 Cavalry Squadrons (incl. 2 armored car and one cyclist) . .		

b. Reserves (Volunteer Force)

	25 Battalions	}	30,000
	13 Cavalry Squadrons (incl. 4 armored car and 3 cyclist) . .		
	30 Field Artillery Batteries . .		
	3 Cooperative Squadrons — approx. 45 ships		
Total strength			37,000

Note—This is entirely inadequate for defense against any major opponent of Great Britain when Ireland's coasts might furnish potential advance submarine and air bases for hostile operations.



BOMBING TIME RANGE TABLE

Lithuania is open to aerial attack from other Baltic nations, Russia, Sweden, Denmark, Germany and Poland, and from carrier based aviation on the Baltic Sea

To	From	Mileage Approximate	Elapsed Time
Kaunas	Polotsk (Rus)	190	46 min
	Instenberg (Ger)	90	22 min

BOMBING TIME RANGE TABLE

Latvia is open to aerial attack from Russia, Poland, Sweden, other Baltic nations, Germany and from carrier-based aviation on the Baltic Sea

To	From	Approximate Mileage	Elapsed Time
Riga	Konigsberg (Ger)	210	51 min
	Pskov (Rus)	165	40 min
Libau	Konigsberg (Ger)	120	29 min
	Gotland (Swed)	120	29 min
	Memel (Ger)	60	15 min

Lithuania

Army and Air Force are under one command. There is no Navy.

ARMY (Defensive force only—conscript)



3 Divisions



1 Brigade



1 Armored car and tank det.



Fortress troops



1 Armored train

War Strength 100,000

Peace Strength 30,000

AIR FORCE

Squadrons—



6 All types 80 ships

Antiaircraft defense is a responsibility of the Air Force.

Latvia

Army, Navy and Air Force under single head. Note that a treaty of mutual defense exists between Latvia and Estonia.

ARMY (Conscript)

a. Regular Army.



4 Divisions



1 Regiment



Fortress troops



1 Armored train (*Note*—Riga-Dvinsk railway line is of Russian gauge.)

War Strength 40,000

Peace Strength 20,000

b. Reserves.

National Militia 25,000

NAVY (Negligible)



2 Submarines

Flotilla of gunboats and launches

AIR FORCE



All types 100 ships

Estonia

Army, Navy and Air Force are under single command. Note that a treaty of mutual defense exists between Estonia and Latvia.

ARMY (National militia)



3 Divisions



1 Regiment



1 Armored car and tank det.



Fortress troops



2 Armored trains

War Strength 50,000

Peace Strength 20,000

NAVY (Negligible)



2 Submarines

Flotilla of fast motor-torpedo launches

AIR FORCE (Negligible)

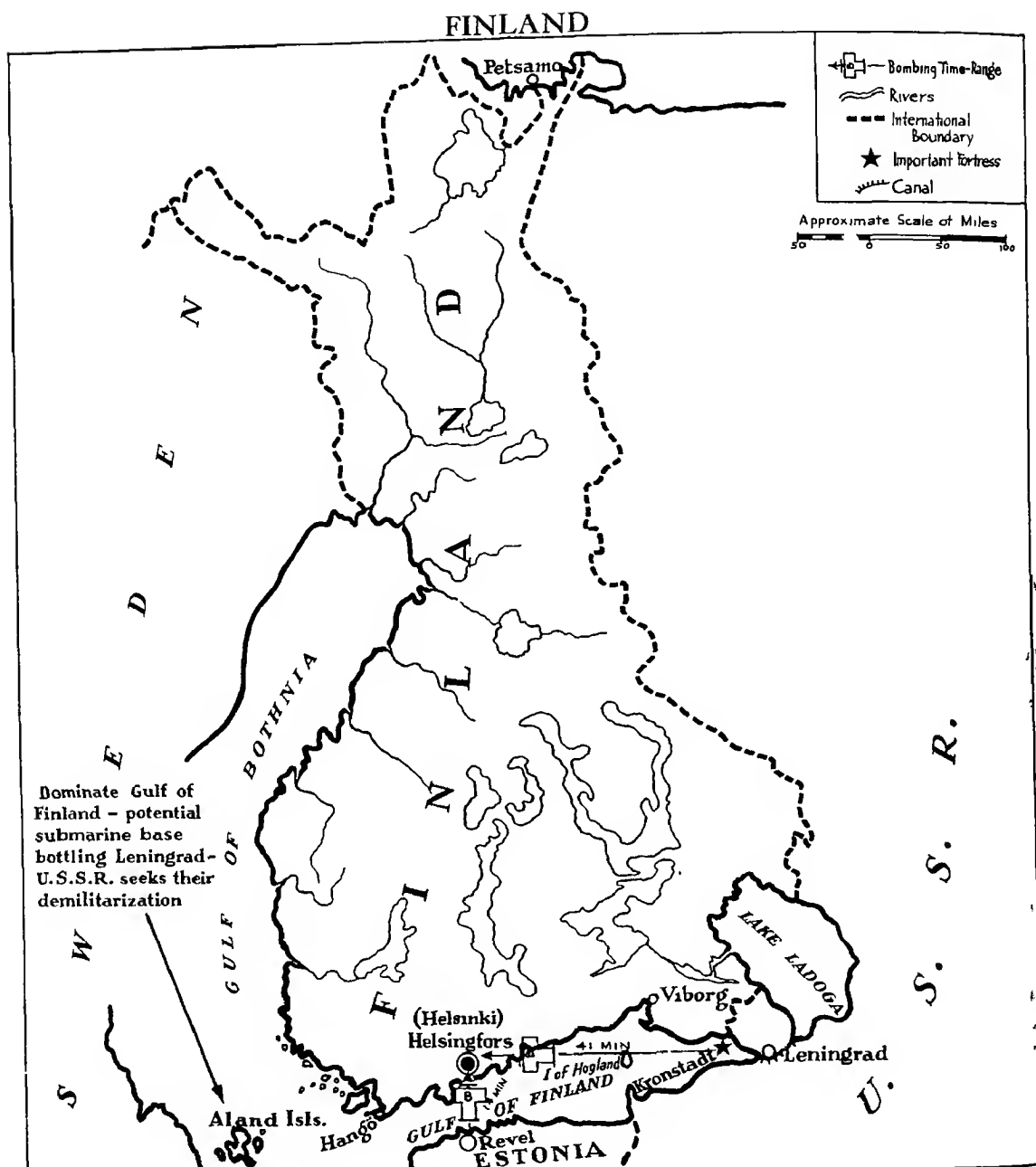


All types 100 ships (approx.)

BOMBING TIME-RANGE TABLE

Estonia is open to aerial attack from Russia, other Baltic nations, Sweden, Germany, Poland and from carrier-based aviation on the Baltic Sea

To	From	Approximate Mileage	Elapsed Time
Reval	Kronstadt (Rus)	180	44 min.
	Helsingfors (Fin.)	55	14 min.
	Königsberg (Ger.)	330	1 hr. 27 min.
	Vilna (Lit)	360	1 hr. 20 min.
	Stockholm (Swed)	240	58 min.



BOMBING TIME RANGE TABLE

Finland is open to aerial attack from Sweden, the other Baltic nations, Germany, Russia and from carrier based aviation on the Baltic Sea

To	From	Approximate Mileage	Elapsed Time
Helsingfors	Stockholm (Swed)	240	58 min
	Königsberg (Ger)	410	1 hr 39 min
	Kronstadt (Rus)	170	41 min
	Reval (Est)	55	14 min

Note—Finland's barren tundra to the north and extensive lake area offer tremendous obstacles to invasion by land

Finland

Army, Navy and Air Force under single head.

ARMY (National militia, defensive only)



3 Divisions



1 Brigade



1 Tank Co.

War Strength	125,000
Peace Strength	25,000

NAVY



2 Coast defense battleships



5 Submarines

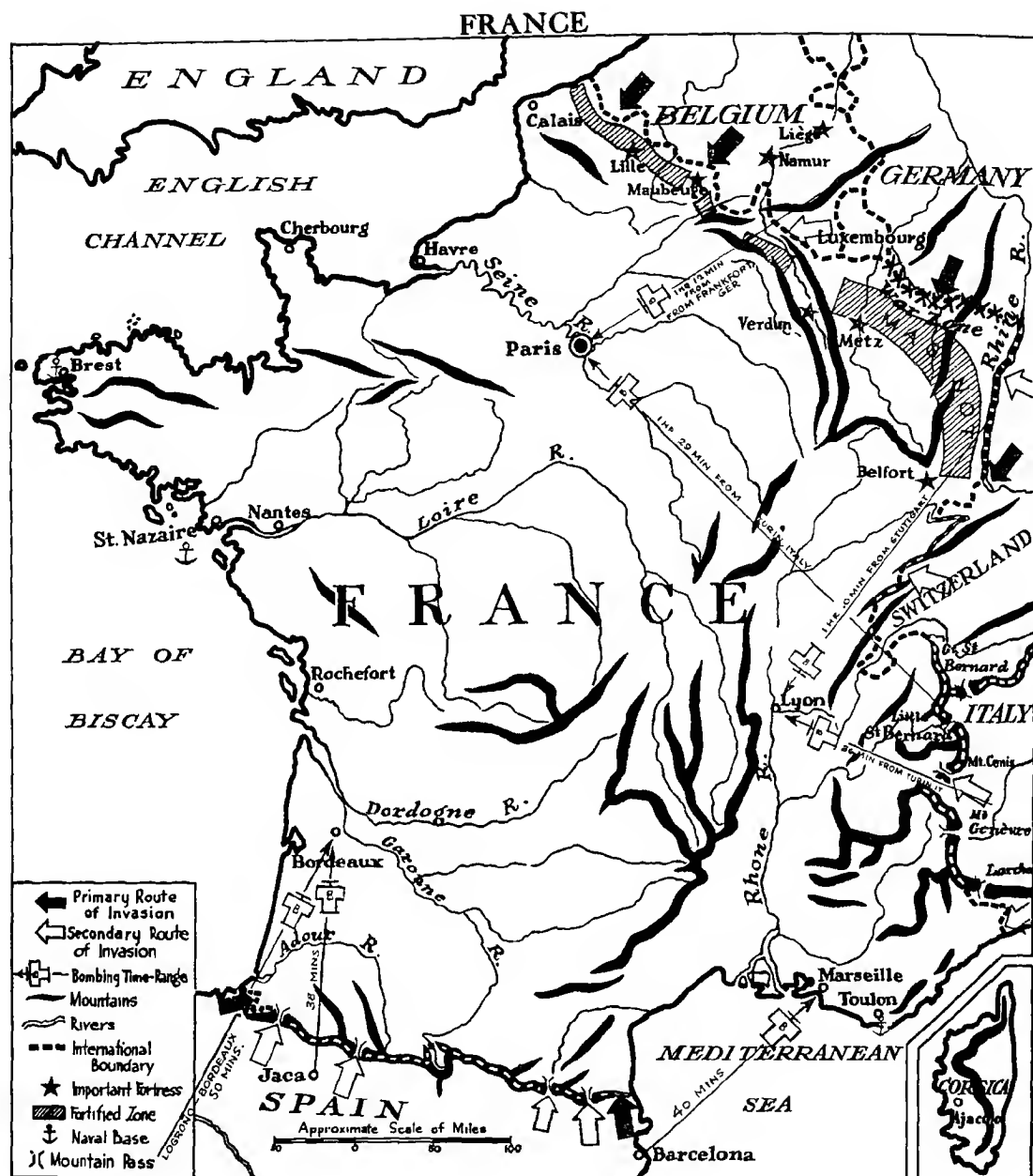
Flotilla of small vessels

AIR FORCE



All classes (including 50 hydro-
planes) 150 ships

Note—The Aland islands, at the mouth of the Gulf of Bothnia. Formerly demilitarized by treaty, they remain under Finnish jurisdiction. As submarine and seaplane bases they block the Gulf of Finland and the sea lane to Kronstadt and Leningrad. In October, 1939, the U.S.S.R. made the claim that the control of the islands and Hango was vital to their defense and began negotiations with Finland for the right to establish bases there.



BOMBING TIME-RANGE TABLE

France is open to aerial attack from British, German, Italian and Spanish soil.

To	From	Approximate Mileage	Time	To	From	Approximate Mileage	Time
Paris	Frankfort A/M (Ger)	300	1 hr 12 min.	Bordeaux	Jaca (Spain)	160	38 min.
	Turin (It.)	370	1 hr. 29 min.		*Stuttgart (Ger)	550	2 hr. 12 min.
Lyons	Stuttgart (Ger.)	290	1 hr. 10 min.		*Cagliari (It)	640	2 hr. 34 min.
	Turin (It)	150	36 min.	Toulon	Spezia (It)	210	51 min.
Marseilles	Cagliari (It)	350	1 hr 24 min	Havre	Coblenz (Ger)	340	1 hr. 22 min.
	Barcelona	193	48 min.	Brest	Santander (Spain)	360	1 hr. 27 min.
	Stuttgart (Ger.)	420	1 hr. 41 min.				
	Innsbruck (Ger.)	400	1 hr. 36 min.				

* probable only if attacker could shuttle: landing on Spanish soil for re-fueling.

Aerial Transport Time—for reinforcements and supply. From England—within one hour to any reasonable objective. From North Africa—within five hours.
(Transport planes average 100 m.p.h.)

France






Army, Navy and Air Army are separate entities, coordinated by the Minister of National Defense (Minister of War) and a Supreme Council of National Defense.

Theory of combat: Initial defense followed by counter-attack.



ARMY

The nation including North Africa is divided into 21 regions (corps areas).



a. *Metropolitan Army* (professional and conscript, permanent establishment available for immediate use in France, including North Africa, and Colonial Army units garrisoned in France)—

	30 Divisions	} 400,000
	4 Cavalry Divisions	
	3 Mobile (partly mechanized) Divisions	
	Fortress Troops (infantry, artillery, antiaircraft, engineers, etc.	} 180,000
	30 Cooperative squadrons (attached from Air Army q. v.)	
Gendarmerie and Garde Mobile—part of Metropolitan Army, normally available only for general and military police duty, not for combat		50,000
Total Regular Establishment		630,000

b. *Reserves* (organized and mobilizable within 60 days)—

	21 Divisions	} 500,000
	50 Artillery Regiments (all types, for Corps and Army general reserve)	
War Strength, Metropolitan Army		1,130,000

c. *Colonial Army* (distributed in overseas possessions—excluding North Africa, and also colonial units now garrisoned in continental France)—

	5 Divisions and 1 Brigade	} 70,000
	1 Cavalry Division	








d. *Colonial Reserves*—Potential reserve strength of France's great African empire is tremendous. Its availability in Europe, however, is dependent upon (1) availability of time for training and (2) possession of sea and air lanes.

e. *Global potential trained man power* of France is 6,000,000.

This figure is entirely theoretical, and should not be used in calculating any immediately available fighting power.

NAVY

Modern ships in commission and nearing completion—vessels projected or just laid down are not counted, since they cannot be considered as available.




	8 Battleships
	7 Heavy Cruisers
	11 Light Cruisers
	63 Destroyers
	80 Submarines
	1 Plane Carrier
	25 Cooperative squadrons (attached from Air army, q. v.)
Personnel—	
Active	73,683
Reserve	44,250
Total	117,933

AIR ARMY

The nation is divided into five air regions.

Total active squadrons are 245, of which 190 are directly incorporated in Air Army tactical units (similar to our GHQ Air Force), and 55 attached to Army and Navy as cooperative squadrons.

Squadrons—

	70 Bomber (light and heavy)	770 ships
	60 Fighter (attack and pursuit)	1,200 ships
	60 Reconnaissance (transport, and general service included)	730 ships

Total first line operating ships (of which 1,500 are of latest types) 2,700 ships

Reserve planes (all types, mainly obsolescent), approximately 1,000 ships

Grand Total 3,700 ships

Personnel—

Military Pilots	6,000
Other ranks	58,650

Total 64,650

5 Regiments Antiaircraft Artillery (part of Army q. v., but attached to Air Army, which is responsible for antiaircraft defense).

Less war losses as announced by the authorities



BOMBING TIME-RANGE TABLE

Germany is open to aerial attack from France, Great Britain, Belgium, Netherlands, the Scandinavian countries, the Baltic countries, Poland, Rumania, the Balkan countries and Russia.

To	From	Approximate Mileage	Elapsed Time	To	From	Approximate Mileage	Elapsed Time
Berlin	Nancy (Fr)	430	1 hr. 43 min	Wilhelmshaven	English Coast	300	1 hr. 12 min.
Kiel	Boulogne S/M (Fr)	425	1 hr 42 min	Essen (Krupp works)	Metz (Fr)	170	41 min.
	English Coast	400	1 hr 36 min	Munich	Belfort (Fr)	225	54 min.
	Carrier (Fr or Br)			Vienna	Zagreb (Jugosl)	170	41 min.
					Kluj (Rum)	360	1 hr 27 min.
	off Dogger Bank	280	max dist 1 hr. 05 min.				
Koenigsberg	Shavli (Lith)	150	36 min.				
	Grodno (Rus.)	150	36 min.				

Note—all north coast of Germany is in extreme short range of carrier-based aviation operating in the North Sea. Note also that given Poland or Rumania as one of several adversaries, shuttling operations may be expected.

Germany





Army, Navy and Air Army are separate entities, controlled by the Führer, assisted by a four-section staff. (1) The Führer's General Staff, (2) Administration, (3) National Defense and (4) Military Economy.


Theory of combat: Seemingly committed to the hammer-blow to crush hostile resistance ab initio. Germany is not economically geared for a long-drawn-out conflict.

ARMY



The nation is divided into six Army Groupings, providing sixteen known corps. To date the *Wehrmacht* (national army) has been built up by a progressive increase of cadres in each unit, the excess being sluffed off to provide nucleus for another new unit. To what future strength it can be pyramided depends entirely upon the national ability to train officer and non-commissioned officer personnel

a. *Regular Army* (Conscript with professional cadres).

	45 Divisions (including 4 motorized, 2 mountain)	630,000
	1 Cavalry Brigade (no cavalry divisional formations; each regular division includes a horsed reconnaissance squadron)	2,000
	6 Mechanized (Panzer) Divisions (three organized in part only)	44,000
	Fortress Troops (artillery, infantry, anti-aircraft (see Air Army), engineers, etc)	80,000
	<hr/>	
	Total Regular establishment	756,000

 10 Squadrons (cooperative, see Air Army).

b. *Reserves*.

	45 Divisions (Estimated only, considered excessive).
	20 Landwehr Brigades (personnel from S. S.).

It does not seem probable that the above cadres are actually formed except for the *Landwehr* brigades, although within two more years it may be possible. Germany has a potential trained and semi-trained manpower—trained officers only are lacking; it may be concluded that a major portion of her potential reserves would be restricted at present to reinforcement and replacement in existing units, and for use as labor troops and in the highly organized industrial mobilization actually functioning today.

c. *Home guard troops* (probably included in the *Landwehr* brigades mentioned above) are:

Feldjäger Corps (from S. A.).
Bahnschütz (railway guards) (from S. S.).

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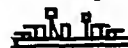
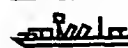
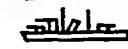


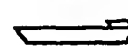
No accurate strength returns of the above or of other semi-military units are available. These elements constitute a highly organized machine for all home-guard surveillance and general mobilization duties, but are not first-line combat troops.


Total potential reserve strength (estimate) presumably now mobilized . . . 2,250,000

Note—Elements detailed above include former Austrian Army; man-power from Czechoslovakia cannot be counted on at this time; material of the former Czech Army is, however, available.

NAVY





Modern ships in commission and nearing completion—vessels projected or just laid down are not counted.

	4 Battleships (2 have 11" guns only)
	5 Heavy Cruisers (includes the 3 so-called "pocket battleships")
	6 Light Cruisers
	43 Destroyers
	59 Submarines
	2 Plane Carriers
	Personnel—
	Active 50,000
	Reserve 20,000
	<hr/>
	Total 70,000


	18 Cooperative Squadrons (attached from Air Army, q. v.)
	Heavy Bombers (include flying boats) 120 ships
	Light Bombers 72 ships

AIR ARMY

Squadrons—


	96 Bomber (Heavy)	1,000 ships
	30 Bomber (Light)	360 ships
	108 Fighter	1,296 ships
	30 Reconnaissance	400 ships
	<hr/>	
	Total first line operating ships	3,056 ships

Reserve planes—

	1st Line (100% replacements, less than three years old) . . .	3,056 ships
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Less war losses as announced by the authorities

Germany (Continued)

	2d Line (obsolescent) all types	2,500 ships
	Total operating ships	<u>8,612 ships</u>

Personnel—

Military Pilots (estimated)	10,000
Other ranks	55,000
Total	65,000




Antiaircraft Artillery

34 Mobile Regiments	}	100,000
12 Fortified area and coastal regiments		
9 Warning intelligence units . . .		20,000
28 Air Depot units		21,000
Total personnel, Air Army . . .		<u>206,000</u>

Greece





Army, Navy and Air Army are separate entities. The Greek forces cannot, however, be rated as first-class fighting elements. Equipment is poor, units are cadres only.

ARMY (Conscript with professional cadres)

	13 Divisions
	2 Cavalry Divisions
	Fortress Troops


War Strength	120,000
Peace Strength	33,000

NAVY (Negligible)

	1 Armored Cruiser (old)
	1 Cruiser-mine-layer (old)
	12 Destroyers
	6 Submarines

Several Torpedo Boats and other smaller craft, all old

AIR ARMY (Negligible)

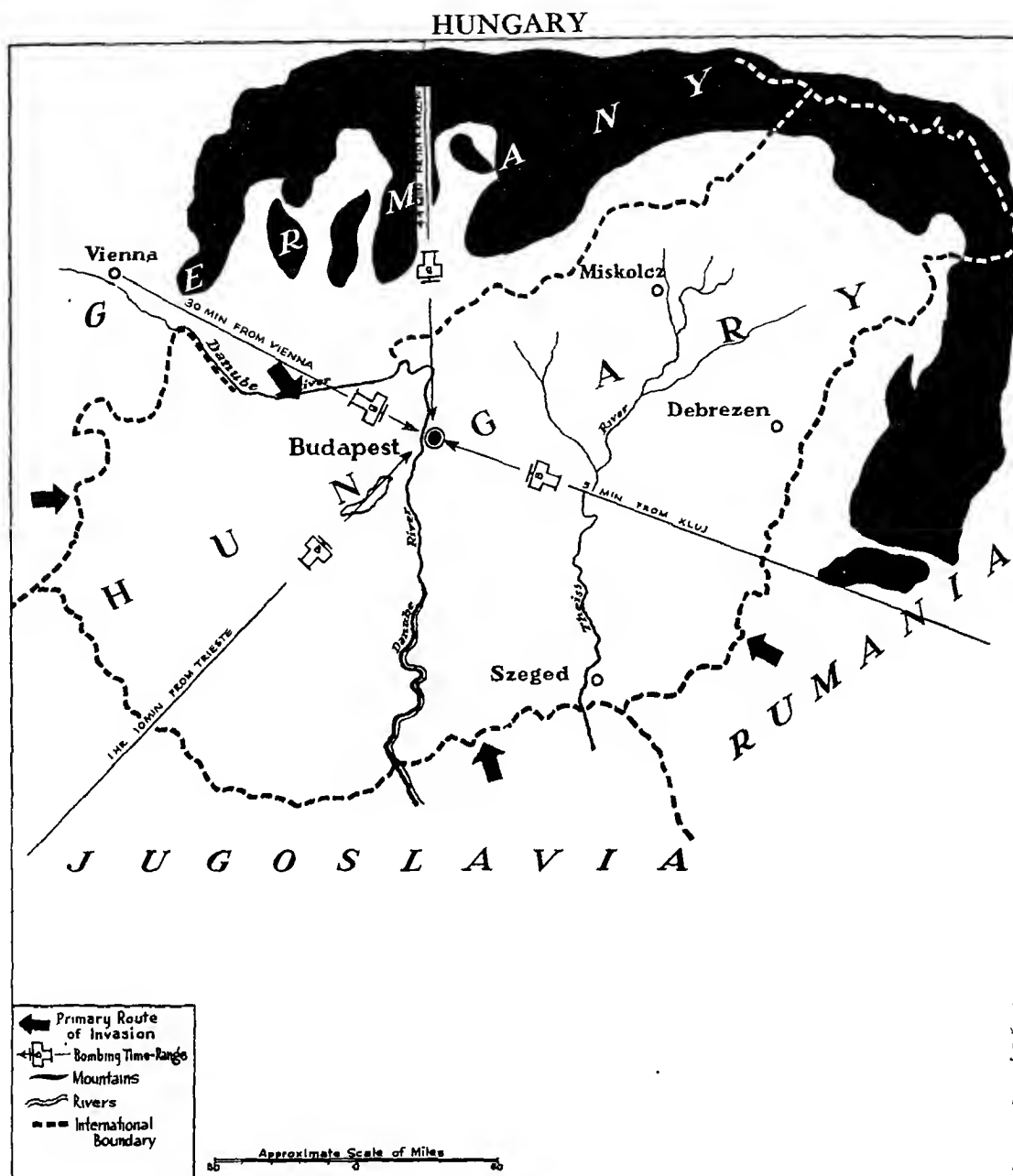
 All classes (including flying boats) 100 ships



BOMBING TIME-RANGE TABLE

Greece is open to aerial attack from Italy, Yugoslavia, Turkey, Bulgaria and from carrier-based aviation on the Mediterranean, Adriatic and Aegean Seas.

To	From	Approximate Mileage	Elapsed Time
Athens	Brindisi (It)	360	1 hr. 26 min.
	Nish (Jugosl.)	385	1 hr. 32 min.
	Leros (It)	190	46 min.
Salonika	Brindisi (It)	265	1 hr. 04 min.



BOMBING TIME-RANGE TABLE

Hungary is open to aerial attack from Germany, Rumania, Russia, Jugoslavia and Italy

To	From	Mileage	Elapsed Time
		Approximate	
Budapest	Krakow (Ger.)	180	44 min.
	Kluj (Rum.)	210	51 min.
	Bar (Rus.)	405	1 hr. 38 min.
	Trieste (It)	290	1 hr. 10 min.
	Vienna (Ger.)	130	30 min.

Hungary

ARMY



7 Divisions



1 Cavalry Division

Now organized in skeleton
form, with peace strength
of 50,000

War Strength (M + 5 days) 70,000

It will be noted that at best these units will be undermanned. Hungary's war machine is now in process of reorganization. An available total of approximately 600,000 men will probably be taken, at least in part, into a mobilization plan, but it is doubtful if any force larger than its existing one can be armed and equipped without outside aid.

Air Force—component of Army, at present negligible.

NAVY

Danube River flotilla, consisting of 6 gunboats and several armed launches—negligible.



BOMBING TIME RANGE TABLES

Italy is open to aerial attack from France, North Africa, Spain, Yugoslavia, Rumania, the Balkan nations, Turkey, Egypt and the French and British Levant, as well as from carrier-based aviation in the Mediterranean.

To	From	Approximate Mileage	Elapsed Time
Rome	Ajaccio (Fr.)	200	48 min
	Bizerta (Fr.)	350	1 hr. 24 min
	Malta (Br.)	450	1 hr. 48 min.
Milan	Lyons (Fr.)	210	51 min
	Zagreb (Jugosl.)	330	1 hr. 20 min
Milan	Friederichshafen (Ger.)	150	35 min.
Turin	Lyons (Fr.)	150	36 min
Spezia	Toulon (Fr.)	210	51 min
Taranto	Bizerta (Fr.)	460	1 hr. 51 min.
Trieste	Toulon (Fr.)	430	1 hr. 44 min.

To	From	Approximate Mileage	Time
Messina	Malta (Br.)	180	44 min.
Cagliari	Bizerta	140	34 min.
Pantelleria	Bizerta	120	29 min.
	Malta (Br.)	150	36 min.
Leros	Cyprus (Br.)	410	1 hr. 39 min.
Naples	Ajaccio (Fr.)	300	1 hr. 12 min.

Note—The entire Po Valley and heavily industrialized area of Northern Italy is within easy bombing range from France. Italy is also susceptible to shuttling operations should her adversaries include nations east of the Adriatic.

Italy







Army, Navy and Air Army are separate entities, coordinated by a Supreme Council of National Defense.

Theory of combat: War of movement, with lightning stroke, stressed. Man is the final factor, aided by the machine. The struggle ends only when the enemy is defeated and vital areas of his country are actually occupied or threatened with occupation. Cooperation—with principle that command in battle is exercised by proper employment of reserves—is also stressed.

ARMY

The nation is divided into four Army groupings furnishing 15 corps

a. Regular (Metropolitan) army.

	37 Divisions (includes 7 mountain divisions)	500,000
	No Cavalry divisions (cavalry units form part of each regular division.)	
	4 Semi-mechanized (Celeri) Divisions (two motorized, two mobile) contain also horsed elements as well as cyclist (Bersaglieri)	40,000
	Fortress troops	60,000
	Highly organized antiaircraft defense system	20,000
	10 Cooperative Squadrons (from Air Army q. v.)	
Total Regular Army		620,000

Note—Albanian and Dodekanese garrisons are included in above.

b. Reserves.

Fascisti militia	500,000	
(mobilizable in 7 days		
—territorial home		
guard—not first line		
combat troops) ..		
Other trained reserves		
(including carabinieri)	330,000	830,000
		<hr/>
Total mobilizable strength.		1,450,000

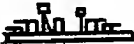

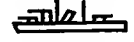


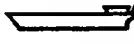

Note—Partial mobilization ensures at present time that all regular units are at war strength. Experimental 2-regiment divisions are said to be in formation.

c. Colonial army.

Regular units 17,000
This figure is by no means an index of strength in Eritria and Ethiopia q.v. An estimated 100,000 regular troops is in the North African possessions today.

NAVY




Modern ships in commission or nearing completion. Vessels just laid down or projected are not counted.

	4 Battleships
	7 Heavy Cruisers
	15 Light Cruisers
	62 Destroyers
	87 Submarines
	Plane Carriers—None. 1 aircraft tender for flying boats (patrol planes)
	Mosquito fleet — so-called "suicide boats," fast aquaplanes carrying one torpedo. Number unknown.
	26 Cooperative squadrons attached from Air Army q.v. 180 ships
Personnel—	
Active	70,000
Reserve	35,000
Total	<u>105,000</u>

Note—Construction of Italian vessels indicates that for the most part they are not intended for long-range cruising. In other words, the Italian Navy is particularly constructed for Mediterranean work.

AIR ARMY

Squadrons

	80 Bomber (light and heavy—includes 34 squadrons of flying boats, 340 ships)	800 ships
	70 Fighter (attack and pursuit)	960 ships
	30 Reconnaissance	400 ships
Total first line operating ships		2,160 ships
Reserve—		
	All classes (60% replacement)	1,800 ships
	(including obsolescent)	
Total operating ships		3,960 ships

Personnel—

Military pilots	8,000
Other ranks	54,000
	<hr/>
Total	62,000

Note—The high percentage of patrol planes (flying boats), indicates Italian intention of taking advantage of Mediterranean island bases.



BOMBING TIME-RANGE TABLE

Jugoslovia is open to aerial attack from Italy, Germany, Hungary, the other Balkan states and from carrier-based aviation in the Adriatic Sea.

To	From	Approximate Mileage	Elapsed Time
Belgrade	Trieste (It.)	330	1 hr. 20 min.
	Szeged (Hun.)	105	26 min.
	Kluj (Rum)	200	48 min.
Zagreb	Trieste (It.)	105	26 min.
	Graz (Ger.)	95	23 min.

Jugoslavia

Army and Navy are combined under a Ministry of Army and Marine. The nation is divided into five military regions.

ARMY (Conscript with professional cadres)

a. Regular Army.



17 Divisions



2 Cavalry Divisions



Fortress Troops (including anti-aircraft)



100 Tanks

Peace Strength 148,000

War Strength M + 10 days 350,000

b. Reserves.

Trained men, not organized in additional
combat units 1,000,000

Total trained force 1,350,000

Note—The Yugoslav Army must be reckoned with as an efficient fighting force, with good training.

c. Air Force (component of Army)

Squadrons—



43 (all types) 400 ships

Second line (obsolescent) 600 ships

Total available planes 1,000 ships

Personnel (included in figures above, and including

Naval Air Force, q. v.)—

Military Pilots 1,600

Other Ranks 7,000

Total 8,600

NAVY

a. Adriatic Flotilla.



1 Light Cruiser (and one old cruiser)



3 Destroyers (and 8 Torpedo Boats)



4 Submarines

Other smaller vessels, including mine-layers

b. Danube Flotilla.

4 River Monitors

4 Patrol boats

Other smaller craft

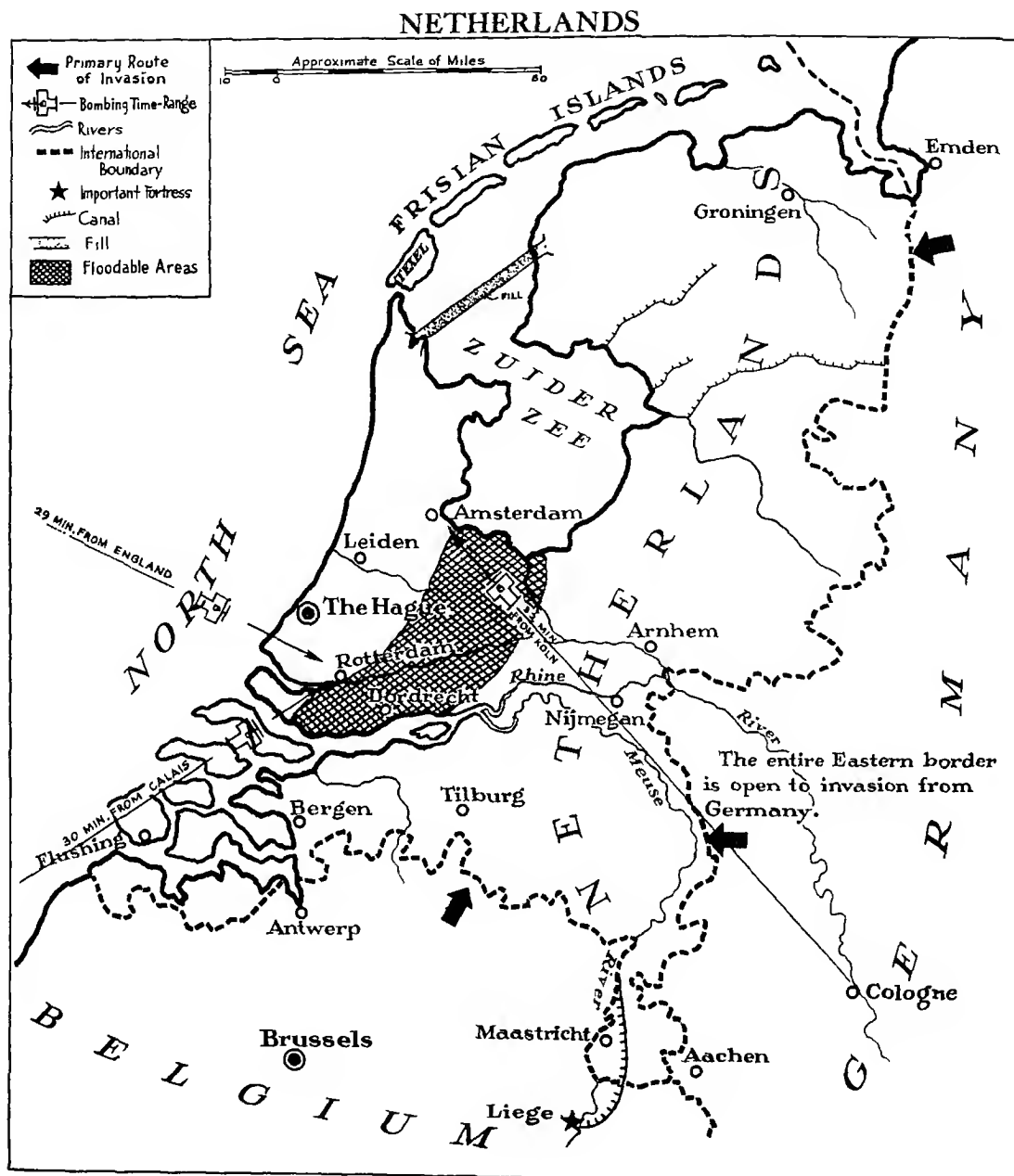
c. Naval Air Force (component of Navy) Squadrons—



9 Seaplane 60 ships

Total Naval personnel 8,000

Note—The Yugoslav Navy, while negligible as compared to Italian Navy, is nevertheless a definite threat to the latter's control of the Adriatic, by mining, submarine and aerial bombardment operations.



BOMBING TIME-RANGE TABLE

The Netherlands are open to aerial attack from Germany, France, Belgium, Great Britain, the Scandinavian countries, and from carrier-based aviation on the North Sea.





To	From	Approximate Mileage	Elapsed Time
Amsterdam	Cologne (Ger.)	130	32 min.
	Antwerp (Belg.)	80	20 min.
	Goteborg (Swed.)	460	1 hr. 50 min.
Rotterdam	English Coast	120	29 min.
	Calais (Fr.)	125	30 min.

Netherlands

Army and Navy are separate entities, with an Air Force component of each.

ARMY (Conscript with professional cadres)

a. Regular Army Metropolitan Army.

	4 Divisions	80,000
	No independent cavalry—horsed elements are contained in each division	
	2 Regiments	} 10,000
	Fortress Troops	
	Antiaircraft (in process of reorganization)	
	War Strength	90,000




Actual Peace Strength of above units is but 40,000.

b. Reserves 290,000

Total 380,000

c. Colonial Forces (garrisoned in overseas possessions)

(1) Regular Army

	2 Divisions	
	Fortress Troops	
	Antiaircraft	
	White	15,000
	Native	25,000
		40,000


(2) Reserves 22,500

War Strength, colonial 62,500


d. Air Force


(1) Metropolitan

Squadrons—

 24 Fighter and Reconnaissance .. 200 ships

(2) Colonial (East Indies)

 10 Bomber 100 ships

 5 Patrol Plane (flying boats—long range bombers) .. 75 ships

(Navy) 175 ships


Total first line planes.. 375 ships

Personnel (included in Army and Navy totals)—


Military Pilots 500
Other Ranks 4,000

Total 4,500

NAVY

 5 Light Cruisers

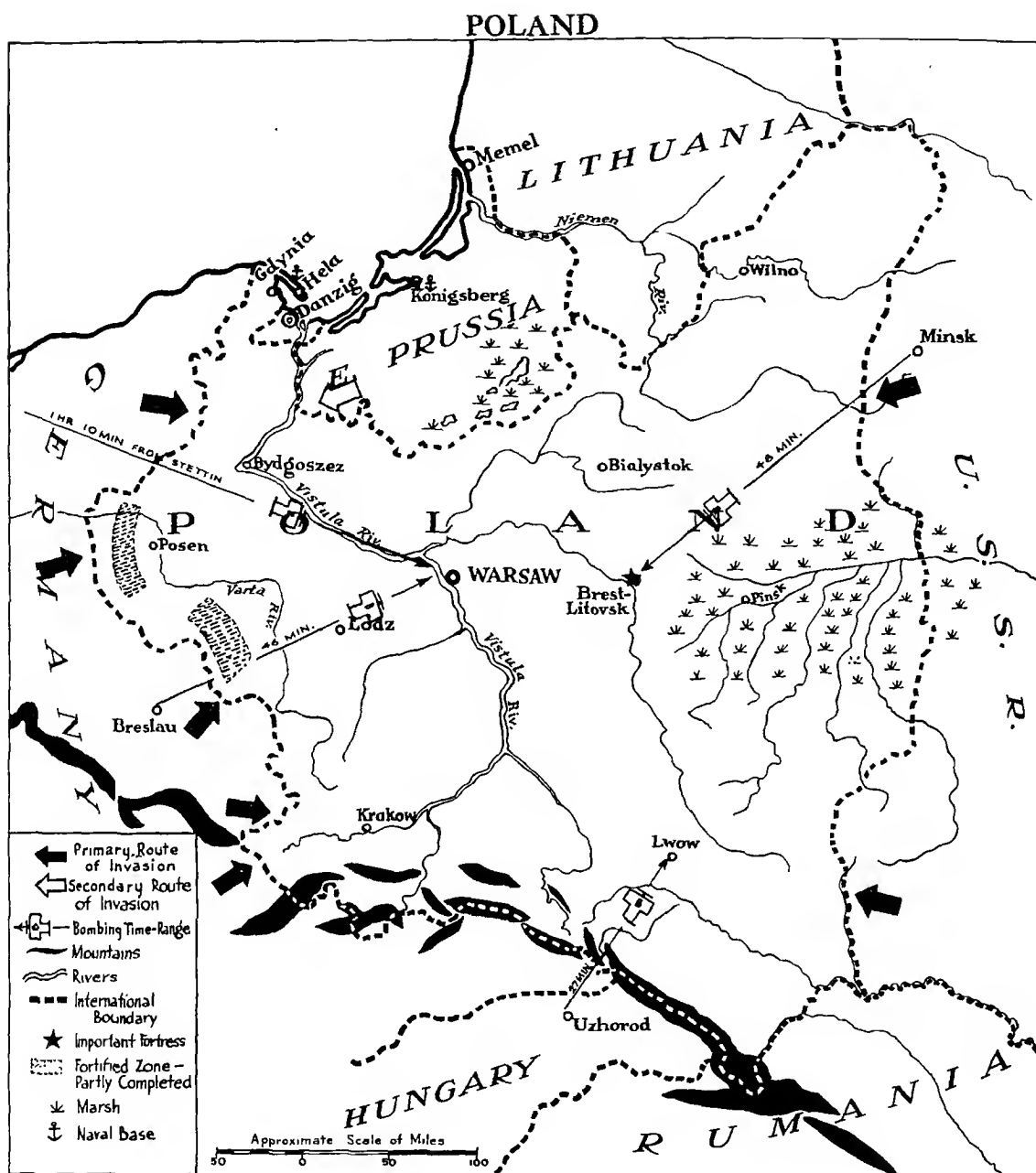
 8 Destroyers

 44 Torpedo Boats (including 32 old, and 20 motor—"suicide"—boats)

 21 Submarines

12 Mine Layers

Personnel—8,901



BOMBING-TIME-RANGE TABLE

Poland is open to aerial attack from Germany, the Baltic states, Russia, Rumania and — by shuttle hmps through Germany—from Italy.

To	From	Approximate Mileage	Elapsed Time	To	From	Approximate Mileage	Time
Warsaw	Allenstein (Ger)	110	27 min.	Brest-	Allenstein (Ger)	180	44 min.
	Stettin (Ger)	285	1 hr 09 min	Litovsk	Minsk (Rus)	200	48 min.
	Breslau (Ger.)	190	46 min	Krakow	Breslau (Ger)	150	36 min.
	Kaunas (Lith)	220	53 min	Vilna	Kaunas (Lith)	60	15 min.
	Minsk (Rus.)	300	1 hr. 12 min.	Pinsk	Dvinsk (Lat.)	260	1 hr. 03 min.
Lemberg	Ungvar (Czs-Ger)	120	29 min.	Danzig	(see Gdynia)		
	Kluj (Rum.)	210	51 min.				
Gdynia	Kolberg (Ger)	120	29 min.				

Note—Many possible opportunities for shuttle operations.






Poland

The War Ministry coordinates all Polish forces under one head.


Theory of combat: unknown. Army is trained along French theory. Poland has but few terrain features to aid or hinder military operations—the Vistula river and the great Pinsk marsh area being the principal ones.

ARMY

a. *Regular Army.* (Conscript with professional cadres).

	30 Divisions (normally skeletonized, now filled by partial mobilization)	345,000
	1 Cavalry Division and 12 cavalry brigades of from four to six regiments each	46,000
	10 Tank battalions (15% new materiel) ..	5,000
	Air Force personnel	5,000
	Fortress Troops, include 10 medium and 1 heavy artillery regiments, for mobile and fixed fortification, engineers, armored trains, anti-aircraft, etc.	20,000
Total Regular Army (mobilizable within 10 days)		421,000

b. *Frontier Defense Force.*

	6 Brigades of Infantry (included in above tabulation) under direction of Ministry of Interior in peace.	
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
The statistics of Poland given in these pages are retained in this book as of interest in showing the defensive state of that country before its invasion and partition by Germany and the U.S.S.R.

Three Polish destroyers are now co-operating with the British Navy, and portions of the Polish Army are serving as a Polish Legion in the French Army.

c. *Reserves.*



Normal available strength (less men now under the colors) 1,160,000 approx.

d. *Air Force.* (Component of army).

	8 Regiments operating (all classes)	800 ships
	Military Pilots	1,000 (approx.)
	Other Ranks	4,000
	Total (included in Army tabulations)	5,000

NAVY

(Negligible)

	3 Destroyers
	3 Submarines

Vistula River Flotilla:

8 small monitors
6 small gunboats
30 armed motorboats

Remarks—Gdynia and Pinsk may be considered as bases. Brest-Litovsk is a first-class fortress. Along the Western front in Volynia a widely scattered string of fortifications is said to have been initiated.

SPAIN-PORTUGAL



BOMBING TIME-RANGE TABLE

Spain is open to aerial attack from France, North Africa, Portugal, Gibraltar (Great Britain) and from carrier-based aviation on the North Atlantic and the Mediterranean.

To	From	Approximate Mileage	Elapsed Time
Madrid	Pau (Fr)	265	1 hr. 04 min
	Campo Maj (Por.)	205	50 min
Cadiz	Gibraltar (Br)	50	12 min
Coruna	Bayonne (Fr)	350	1 hr 24 min
Palma			
(Majorca)	Algiers (FNA)	200	48 min.
	Perpignan (Fr)	220	53 min.

Spain is ideally situated as target for shuttling operations between France, Portugal and North Africa.

BOMBING TIME-RANGE TABLE

Portugal is open to aerial attack from Spain, Gibraltar (Br.) and France, and from carrier-based aviation in the North Atlantic and Mediterranean.

To	From	Approximate Mileage	Elapsed Time
Lisbon	Gibraltar (Br)	285	1 hr. 09 min.
Porto	Bayonne (Fr.)	400	1 hr. 36 min.

Spain

No authentic data exist today on the strength and dispositions of the Spanish Army.

All major nations need Spain as an ally.



Portugal

Portugal's fighting forces are negligible in any major European struggle. The value of the nation and her colonial possessions is as bases for operations dominating Spain or protecting British and French maritime life lines.

ARMY

a. *Regular Army*



8 Divisions 160,000



1 Cavalry Brigade 5,000

War Strength, Regular Army 165,000

This force exists principally on paper, the units being skeletonized. Mobilization time not less than M + 30 days. Air Force is negligible.

b. *Reserves.*

Estimated additional trained man-power 235,000

NAVY (Negligible)



BOMBING TIME-RANGE TABLE

Rumania is open to aerial attack from Germany, Italy, Hungary, Russia, Turkey, and other Balkan states.

To	From	Approximate Mileage	Elapsed Time	To	From	Approximate Mileage	Elapsed Time
Bucharest	Leros (It.)	510 *	2 hr. 03 min.	Jassy	Bar (Rus.)	130	32 min.
	Munkacevo (Hun.)	320	1 hr. 17 min.		Lwow (Rus.)	250	1 hr. 00 min.
	Sevastopol (Rus.)	360	1 hr. 27 min.	Kluj	Iwow (Rus.)	220	53 min.
	Odessa (Rus.)	260	1 hr. 03 min.		Nish (Jugsl.)	250	1 hr. 00 min.
	Nish (Jugsl.)	225	54 min.				
Constantza	Sevastopol (Rus.)	240	58 min.				
	Leros (It.)	500	2 hr. 00 min.				
	Ismir (Tur.)	240	58 min.				

*Long range bombers only.

Rumania

Army, Navy and Air Force are under jurisdiction of the Ministry of National Defense. Army and Navy are separate entities, with Air Force a part of the Army.

Theory of Combat: Defensive. In this the terrain assists except in Bessarabia and the Dobrudja. Efforts at construction of a fortified zone are reported along the Pruth River.

ARMY (Conscript with professional cadres)

The nation is divided into seven corps areas.



25 Divisions; of these 2 are mountain, organized as a light infantry corps; one is the Guard Division (household troops).



4 Cavalry Divisions and 8 separate regiments—1 to each corps, 1 to Guard Division.



4 Tank Regiments



Fortress troops, frontier guards, etc.

- a. The above elements, skeletonized in peace time, exist, with strength of... 200,000
- b. War Strength mobilizable by M+15 days (above units only, reinforced) 392,000
- c. Reserves—additional mobilizable strength 1,208,000

Note—that the nation lacks materiel, that existing materiel is poor, and of varied nature.

d. Air Force



32 Squadrons, of all classes, including hydroplanes (100 of these less than 3 years old) 500 ships

Reserve ships, all classes (obsolescent) 300 ships

Total operating ships 800 ships

8 Regiments (part of Air Force) (skeletonized) 6,400

Air Force—8 regiments

Military pilots 1,000

Other ranks 7,000 8,000

Total Air Force (included in a above) 14,600

NAVY



4 Destroyers

4 Gunboats

7 River monitors (Danube flotilla)

20 Patrol vessels

2 Armed launches (Dniester flotilla)

Personnel (est.) 1,500



BOMBING TIME RANGE TABLE

Western Russia is partly open to aerial attack from Germany, Scandinavian countries, Baltic countries, Rumania, Turkey, Iran, and from carrier based aviation in both Arctic and Baltic Seas

To	From	Approximate Mileage	Elapsed Time	To	From	Approximate Mileage	Elapsed Time
Moscow	Vilna (Lith)	500	2 hr 00 min	Kiev	Ungvar (Ger)	390	1 hr 34 min
	Dorpat (Est)	450	1 hr 48 min		Jassy (Rum)	270	1 hr 05 min
	Dvinsk (Lat)	450	1 hr 44 min	Odessa	Jassy (Rum)	160	39 min
Leningrad	Viborg (Fin)	70	17 min	Sevastopol	Burgas (Bul)	340	1 hr 22 min
	Reval (Est)	200	48 min	Batum	Sivas (Tur)	280	1 hr 08 min
	Gotland (Swed)	160	1 hr 51 min	Baku	Teheran (Iran)	335	1 hr 21 min
Minsk	Insterburg (Ger)	240	58 min	Archangel	Oulu (Fin)	450	1 hr 48 min

Russia

Union of Soviet Socialist Republics

Army, Navy and Air Army are separate entities.

Theory of combat—Essentially defensive, despite the oft-time repeated assertion that if attacked Soviet Russia would carry the offensive into the other nation's territory.

ARMY

Nation is divided into 16 military areas.


The Red Army is perhaps the least known to outsiders of any military force in the world. The most fantastic figures have been published, to which credence is lent at first glance by the almost unlimited manpower of the nation. The following factors must be reckoned with in estimating Russia's military strength—


a. Availability of materiel.


b. Great length of time necessary for anything like complete mobilization, due to enormous distances and paucity of rail and motor roads.


The Army is organized into 21 corps, each of which is made up of several divisions. However, in all but three of these corps there is but 1 Regular division; the remaining three have 2 regular divisions each. Officer morale is low (because of recent "purges") and higher tactical training mediocre. Three army groupings exist, the Western Front, Caucasus and Far East (q. v.)


a. *Regular Army.* (Conscript with professional cadres).


 26 Divisions 390,000


 14 Cavalry Divisions 140,000

 3 Mechanized Divisions 42,000

 Tank Corps (estimated 3,000 armored vehicles, subdivided amongst corps) 15,000

 Fortress Troops—infantry, heavy artillery, engineers, etc. 50,000

 28 Mobile regiments, plus area defense units 28,000


 Co-operative squadrons from Air Army (details unknown).

Total 665,000

b. *Reserves:*

These units are now encadred, and at approximately half-strength.

 21 Divisions 158,000

 15 Cavalry Divisions 75,000

G. P. U (military formations, seemingly equal to rest of Red Army as combat troops, probably for use as interior guards) 150,000

383,000


Total available on M-Day (at mobilization points throughout Russia, not in any one area) 1,048,000

c. Augmentation by mobilization to fill above listed reserve units, available by M+ 60 days 233,000

Total available by M+ 60 days ... 1,281,000

d. *Territorial Army.*

Mobilizable not before M+ 90 days at earliest, probably much longer. Cadres for these units appear to exist.

 42 Divisions 730,000


Total organized strength 2,011,000


It is not believed probable that materiel exists today in Russia to put more than the above strength into the field properly equipped, armed, and led.


Potential trained man-power 14,000,000

NAVY


Ships in commission or completing. Vessels projected or just laid down not counted. Much mystery surrounds Russia's naval strength today. The following is the best estimation possible—

 5 Battleships (old)

 7 Heavy Cruisers

 4 Light Cruisers (possibly more)

 23 Destroyers (possibly more)

 200 Submarines (possibly more)—90 said to be in Far East waters.

Carriers—none—?

80 Coastal motorboats (Far Eastern waters)

Amur River Flotilla—

32 Gunboats

75 Armed launches

(Continued on next page)

Russia (Continued)

Personnel—60,000 (est.)



Cooperative squadrons from Air Army
q. v. (number unknown)

AIR ARMY

Squadrons



140 Bomber (heavy) 420 ships



60 Bomber (light) 1,000 ships



460 Fighter 3,030 ships



110 Reconnaissance (including transport, etc.) 1,100 ships

Total operating ships (50% more than 3
years old) 5,550 ships

Personnel—

Military Pilots 8,000

Other ranks 51,000

Total 59,000

(does not include semi-military pilots of the
Osoaviakhim, nor parachute-jumper units).

Note—Russia's permanent establishment is set up for
a two-front contingency, hence her Army and
Air Army are definitely divided between Russia
in Europe and Siberia, with approximately one-
half the regular establishment and two-thirds of
the territorial forces mobilizable in the west.

See page 73 for Siberia.

Switzerland

The nation is organized with an Army composed
almost entirely of militia, with permanent establishment
of 450 officers and men. The size of the country and
the state of training facilitates prompt mobilization of
its forces. Approximately 9,000 of its militia are at all
times under arms. Militia service is obligatory.

ARMY



9 Divisions and 3 separate
brigades 180,000



Now in progress of reorganization 5,000

M Day strength 185,000

Total war strength mo-
bilizable in M+4 days 450,000

AIR FORCE (Component of Army)

Squadrons—



35 All types—essentially a recon-
naissance force 350 ships

Reserve—obsolescent Fokkers .. 200 ships

Total operating ships.. 550 ships

Like the rest of the Army, the Air Force is skele-
tonized in peace time. The number of military pilots is
small.

A detailed map of Switzerland and its surrounding regions, illustrating potential invasion routes and bombing time-ranges during a conflict. The map shows the Swiss Alps, major cities like Geneva, Lausanne, Bern, Zurich, and Basel, and the surrounding countries: France to the west, Italy to the south, and Germany to the north. Key features include the Rhine River, Lake Geneva, and the Simplon Tunnel. Arrows indicate secondary routes of invasion, while shaded areas represent bombing time-ranges from various locations. A legend in the bottom right corner defines the symbols used, and a scale bar at the bottom indicates distances in miles.

Legend:

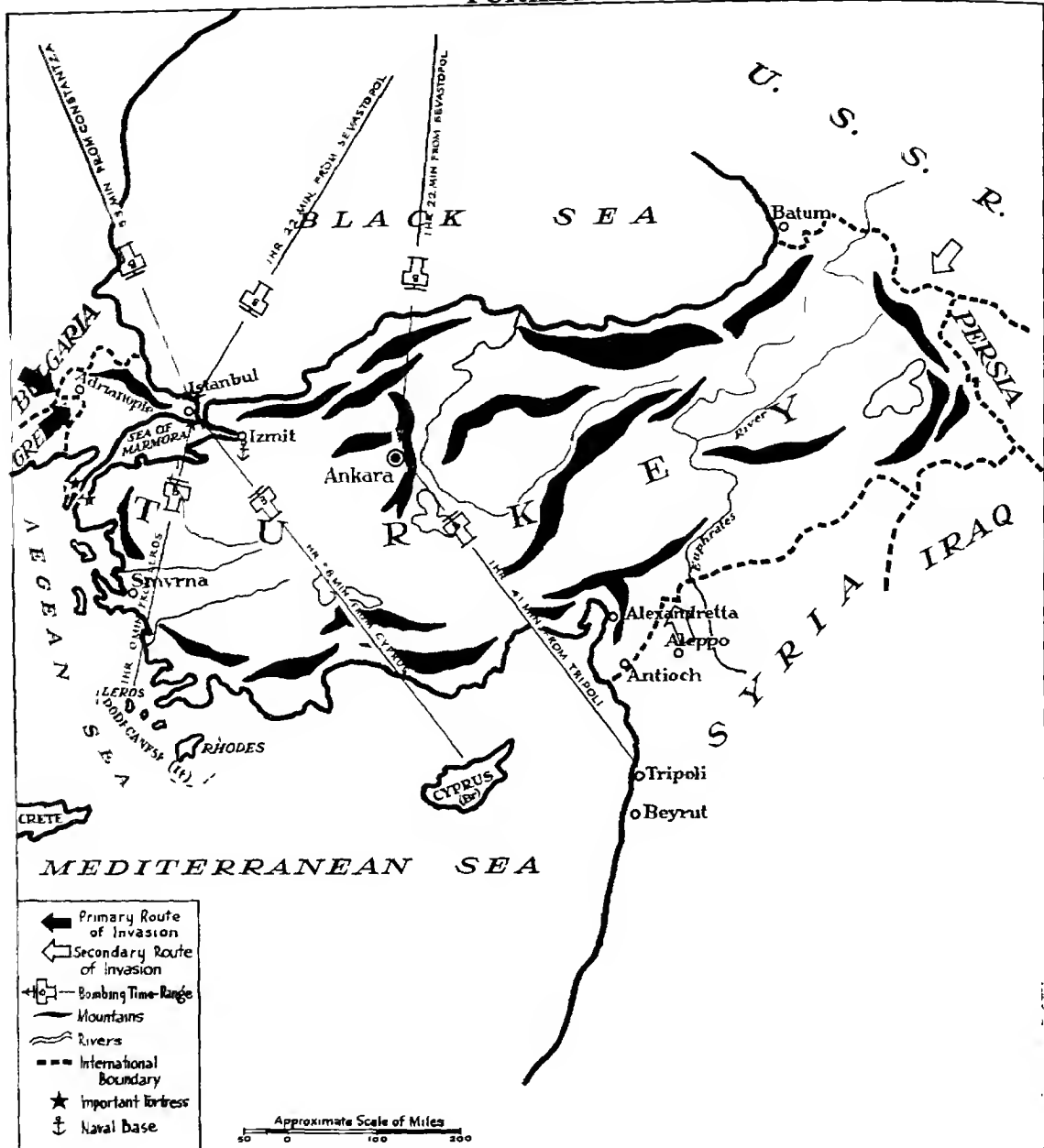
- Secondary Route of Invasion (dashed line with arrows)
- Bombing Time-Range (shaded area)
- Mountains (hatched area)
- Rivers (wavy line)
- International Boundary (dashed line)
- Important Fortress (star symbol)
- Mountain Pass (double line with a cross)

Approximate Scale of Miles: 0 to 50

Switzerland is open to aerial attack from Germany, Italy and France.

To	From	Approximate Mileage	Elapsed Time	To	From	Approximate Mileage	Elapsed Time
Geneva	.....Lyons (Fr.)	70	17 min.	Zurich	.....Stuttgart (Ger.)	105	26 min.
	*Turin (It.)	105	26 min.		*Como (It.)	110	27 min.
Bern	.....Stuttgart (Ger.)	155	38 min.		Friedrichshaven (Ger.)	52	12 min.
	Belfort (Fr.)	60	15 min.		*Note The above are air-line distance, horizontal. Actual elapsed time would be greater, due to necessity of gaining altitude over the Alps.		
	*Como (It.)	110	27 min.				

TURKEY



BOMBING TIME RANGE TABLE

Turkey is partly open to aerial invasion from Russia, the Balkan States, Italy (Leros), Great Britain (Cyprus), France (Levant), and from carrier based aviation on the Black and Mediterranean Seas

To	From	Approximate Mileage	Elapsed Time
Istanbul	Leros (It)	290	1 hr 10 min
	Sevastopol (Rus)	340	1 hr 22 min
	Salonika (Gr)	315	1 hr 16 min
	Cyprus (Br)	490	1 hr 58 min
	Constantza (Rum)	220	53 min
Ankara	Sevastopol (Rus)	325	1 hr 18 min
	Tripoli (Fr)	420	1 hr 41 min

Turkey

Army and Navy are separate entities. Air Force is part of Army.

ARMY (Conscript with professional cadres)



22 Divisions



3 Cavalry Divisions



? (said to be in organization)



Fortress Troops

War Strength 700,000

Peace Strength 160,000

AIR ARMY



Bombers 150 ships



Fighters 300 ships



Reconnaissance 100 ships

Total first line 550 ships

Second line (obsolescent) 400 ships

Personnel (included in above)—

Military Pilots 600

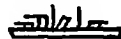
Other Ranks 7,800

Total 8,400

NAVY



1 Battle Cruiser (most powerful unit in Black Sea, rebuilt and fit to lie in the line)



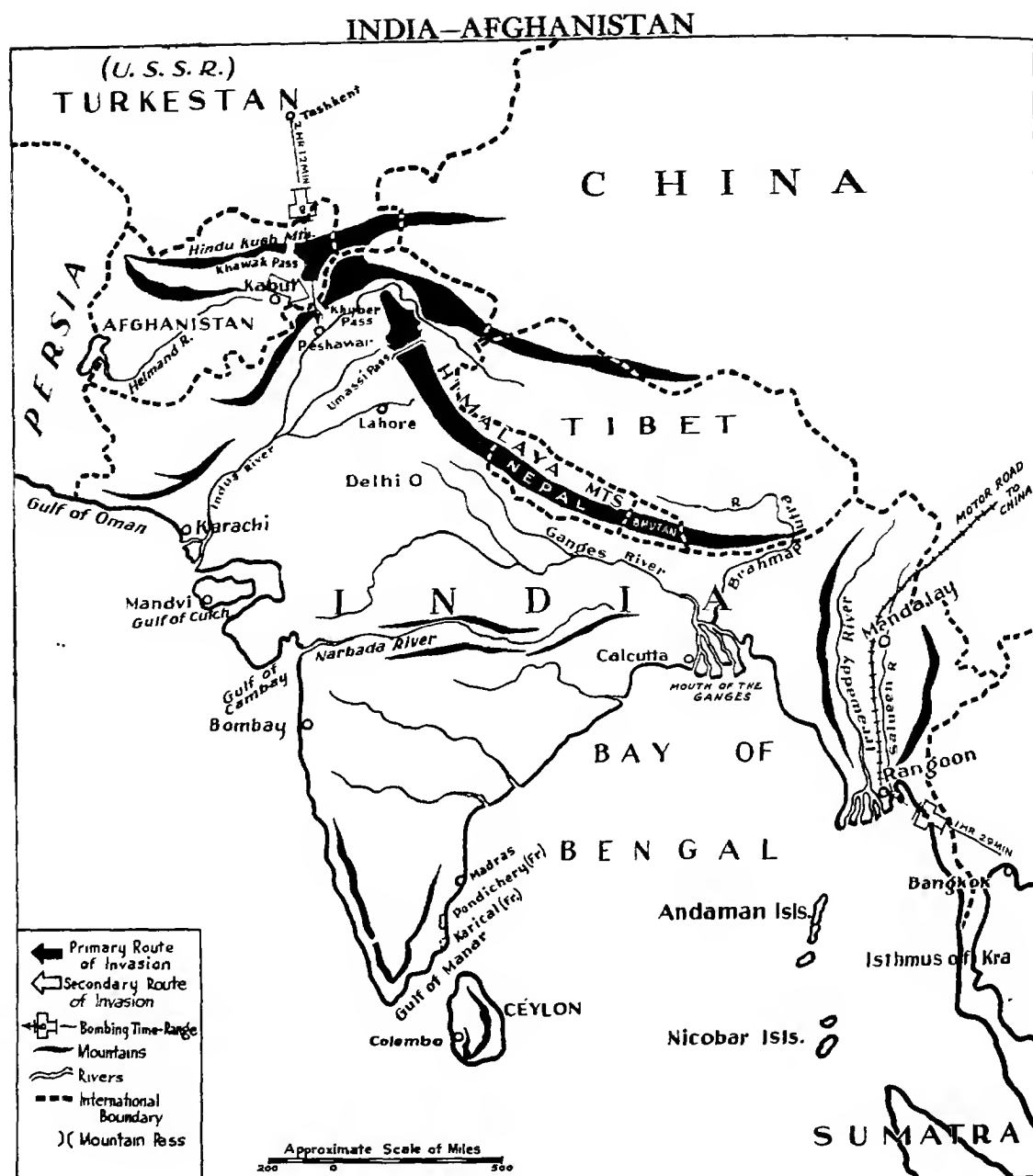
2 Light Cruisers—old



4 Destroyers



9 Submarines



BOMBING TIME-RANGE TABLE

India is well protected in great part from air raids, due first to the distances between her principal strategic points and foreign airdromes, and second to the wide-flung Himalayas, whose heights definitely canalize the airways to a certain few passes. She is open to attack from carrier-based and seaplane aviation from the Bay of Bengal and Arabian Sea, but here anything beyond sporadic raids must necessitate enemy possession of (a) the Suez Canal-Red Sea line, or (b) the Malay Straits. Bombay and Colombo are both more than 1,000 miles from potential hostile land bases.

To	Front	Approximate Mileage	Elapsed Time
Peshawar	Tashkent (USSR)	550	2 hr. 12 min.
	Kabul (Afgh'st'n)	160	39 min.
Lahore	Kabul (Afgh'st'n)	370	1 hr. 29 min.
Rangoon	Bangkok (Siam)	370	1 hr. 24 min.
Calcutta	Bangkok (Siam)	1,000	4 hr. 00 min.




*Possible only for a few of the most modern bombers.

India

ARMY

a. Regular Army:

A composite force, composed of British regular units (British Army in India), and Indian regular units, secured by voluntary enlistment, with professional officer corps (Indian Army). The Indian Army officer corps is composed of both British and natives. Indian units are brigaded with British units in divisions, in normal proportion of 1 British to 3 native battalions. The British Army in India totals 53,000, the Indian Army totals 181,000, a total strength of 234,000, organized as follows:

	4 Divisions	} 234,000
	4 Cavalry Brigades	
	Fortress troops	

b. Reserves:—(organized and mobilizable immediately)

- (1) Auxiliary Force (British subjects residing in India, formed in non-divisional volunteer units, all arms) ... 34,000

(2) Territorial Force (Indian) 27,000

(3) Native States (Armies of independent potentates, organized, armed and trained in British method) 45,000

————— 106,000

War strength 240,000


Note—British units in above are not included in Great Britain tabulation.


NAVY (Included in British Navy, q. v.)

5 Sloops. Personnel, 1,457.

AIR ARMY (Detachment of Royal Air Force, Great Britain, q. v. and Royal Indian Air Force.)

Squadrons—

 4 Bomber

 4 Cooperative, attached to Army.

Afghanistan

ARMY (Conscript with professional cadres. Lately organized.)

War strength 100,000

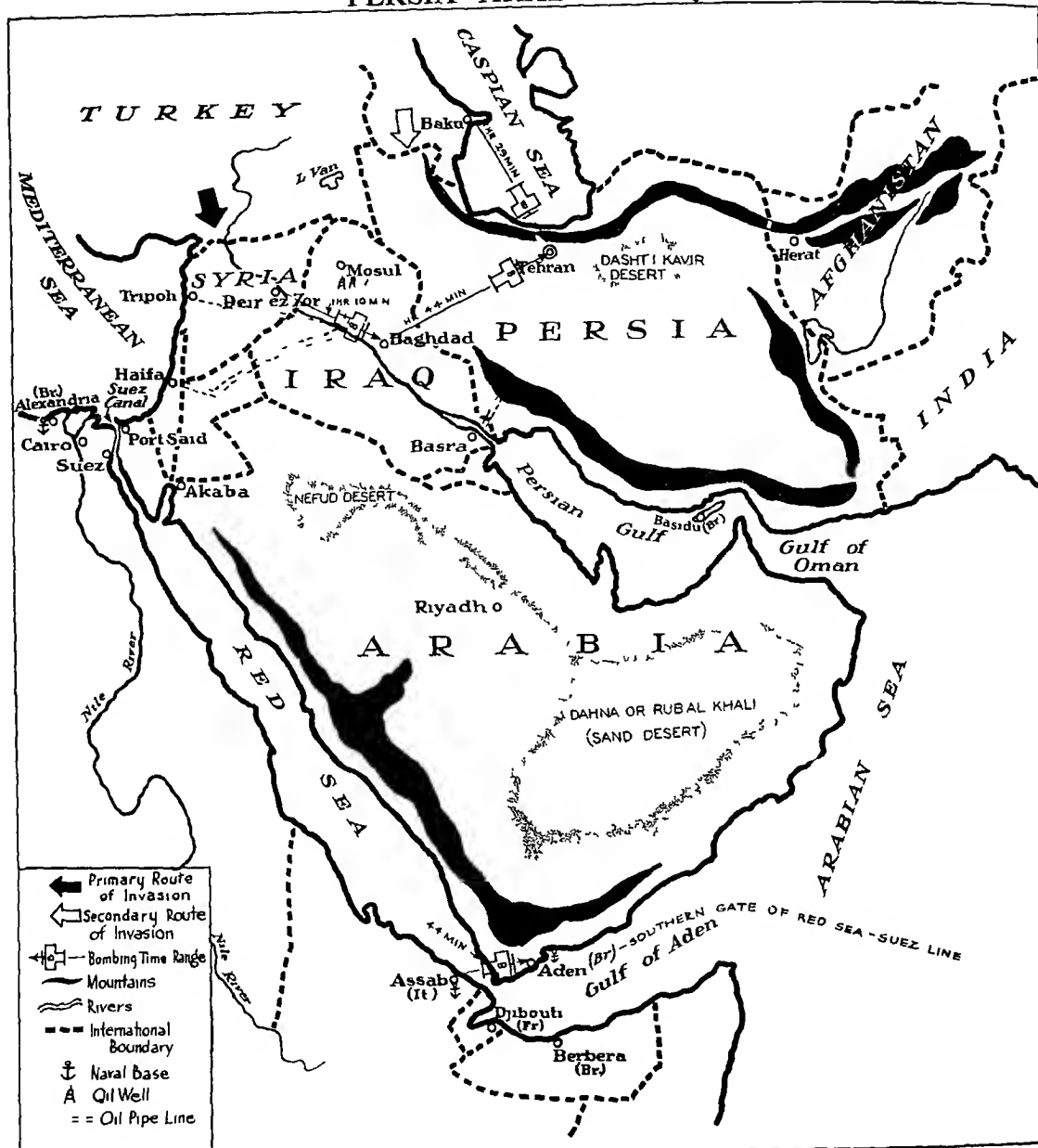
Of importance only in guerrilla warfare.

BOMBING TIME-RANGE TABLE

Afghanistan is open to aerial attack from Russia, India and Persia. Account must be taken of difficulties of flying over the Hindu Kush.

To	From	Approximate Mileage	Elapsed Time
Kabul	Peshawar (Ind.)	180	44 min.
	Samarkand (USSR)	380	1 hr. 32 min.

PERSIA-ARABIA-IRAQ



BOMBING TIME RANGE TABLE

Iraq is open to aerial attack from Syria, Turkey, Persia, Palestine and Arabia, and from carrier based and sea plane aviation in the Persian Gulf

To	From	Approximate Mileage	Elapsed Time
Baghdad	Deir ez Zor (Syr Fr)	290	1 hr 10 min
	Tehran (Per)	430	1 hr 44 min
	Riyadh (Arabia)	670*	2 hr 41 min
	Van (Turk)	380	1 hr 32 min

Feasible by shuttling only

Iraq

ARMY (Conscript with professional cadres)



2 Divisions



1 Cavalry Brigade



2 Squadrons—cooperative 30 ships

Peace strength 20,000
War strength 50,000

Persia (Iran)

ARMY (Conscript with professional cadres)



9 Divisions and 5 separate brigades



All types 200 ships.

Peace strength 35,000
War strength 180,000

BOMBING TIME-RANGE TABLE

Persia is open to aerial attack from Russia, Turkey, Iraq, Afghanistan, India, Arabia and carrier-based and seaplane aviation on the Caspian Sea, Persian Gulf and Arabian Sea.

To	From	Approximate Mileage	Elapsed Time
Tehran ...	Baku (Russ.)	370	1 hr. 29 min.
	Baghdad (Iraq)	430	1 hr. 44 min.
	Basra (Iraq)	420	1 hr. 41 min.
Basidu (British), in mouth of Persian Gulf ...	Herat (Per.)	670*	2 hr. 41 min.
	Kerachi (Ind.)	760*	3 hr. 03 min.

*Feasible by shuttling only.

Arabia

Regular armed forces negligible. Of military importance only in consideration of its relation to the

Suez Canal, and to Britain's life-line through the Red Sea and into the Indian Ocean. See map.

BOMBING TIME-RANGE TABLE

Arabia is open to aerial attack from Italian East Africa and from carrier-based and seaplane aviation on the Red Sea and Indian Ocean.

To	From	Approximate Mileage	Elapsed Time
Aden (Br.)	Assab (It.)	170	44 min

CHINA



China

No details of China's actual strength or armed forces are available at the present time. More than 1,000,000 men are in arms, engaged in guerrilla warfare under various commanders, with a National Army in possible

state of reconstruction, hampered by lack of supply communications. Japan holds all seaports and railways. See map for communications routes still open to Chinese National forces.





Outer Mongolia

A republic, nominally under Chinese suzerainty, it is in fact loosely linked with the U. S. S. R. by a mutual assistance pact consummated March 12, 1936. Uliassutai, 460 flying miles from Ulan Bator, is terminus of the Russian railway from Semipalatinsk. Another Russian railway thrusts down from Verkeudinsk in Siberia to Ulan Bator (Urga). These railways furnish communications for basing forces operating in Outer Mongolia. The Great South Road—from Ebi Nor to Lanchow, age-old silk caravan route—is one of the few remaining supply channels for Nationalist China.

ARMY

a. Regular Army.

An unknown quantity. Russian trained and equipped, its uniforms are practically identical with those of the U. S. S. R. No accurate data are available on strength. A fair estimate is—

	2 Divisions (or equivalent)	} 40,000
	2 Cavalry Divisions	
	200 Tanks (Russian materiel)	
	50 ships, all classes (Russian materiel)	

b. Reserves.

Nomadic units, loosely organized and capable of guerrilla warfare only, approximately 100,000

Total strength 140,000

c. Operations.

Similarity of uniforms and materiel render it possible for the U. S. S. R. to maintain a portion of its armed forces on Mongolian terrain for training purposes.

Air missions operating from Uliassutai and Ulan Bator can, and doubtless do, furnish protection to munitions convoys on the Great South Road, besides harrassing Japanese operations along the border and out of Kalgan, base for future Japanese operations striking into Mongolia with objective of cutting Soviet communications in the Lake Baikal area of Siberia.

MALAYA - DUTCH EAST INDIES



BOMBING TIME RANGE TABLES

The Dutch East Indies are open to aerial attack from the Malay States, Sarawak, British North Borneo, Japanese-owned or mandated islands, the Philippines, Australia, and from carrier-based and sea-plane aviation on the China Sea, Indian and Pacific Oceans

To	From	Approximate Mileage	Elapsed Time
Batavia (Java)	Singapore (Br)	560*	2 hr 15 min
	Kutching (Sar Br)	540~	2 hr 10 min
Amboina Is	Tobi Isl (Jap)	570*	2 hr 17 min
	Bathurst Is (Aus)	580*	2 hr 20 min
Medan (Sumatra)	Georgetown (Br)	180	44 min
Natoena Is	Spratly Is (Jap)	420	1 hr 41 min.
Makassar Straits	Zamboanga (P. I.)	520*	2 hr. 05 min.



* Long range bombers only

Dutch East Indies

The data shown below are included in Netherlands.
q. v.



ARMY

a. Regular Forces—

	2 Divisions	(White, 15,000)	
	Fortress Troops (including anti-aircraft)	(Native 25,000)	40,000
b. Reserves			22,500
War strength			62,500

c. Air Force

Squadrons—

	10 Bomber (Army)	100 ships
	5 Patrol Planes (flying boats) (Navy)	75 ships
Total operating ships		175 ships

Air Base—Amboina Island.

NAVY

See Netherlands—major portion of navy rotates on East Indies station.



Malaya

Includes the entire British outpost position in the Far East based primarily upon Singapore and secondarily upon Hong Kong. Territory involved, excepting Hong Kong, is the Malay peninsula and British possessions in Borneo.





ARMY (British and Indian Army regular troops, not included in totals for India).

a. Hong Kong—Singapore Force.

(1) Singapore garrison:—

	2 Reinforced Brigades (all arms)	18,000
	Fortress troops (Artillery, Anti-aircraft, etc.)	

(2) Hong Kong garrison (Island of Hong Kong and the Kowloon mainland area leased from China)

	1 Brigade	10,000
	1 Cavalry Regiment	
	1 Battalion Field Artillery	
	Fortress troops (Artillery, Anti-aircraft, etc.)	

The Hong Kong-Singapore Force is an elastic organization, reinforced as desired from India.

b. Reserves

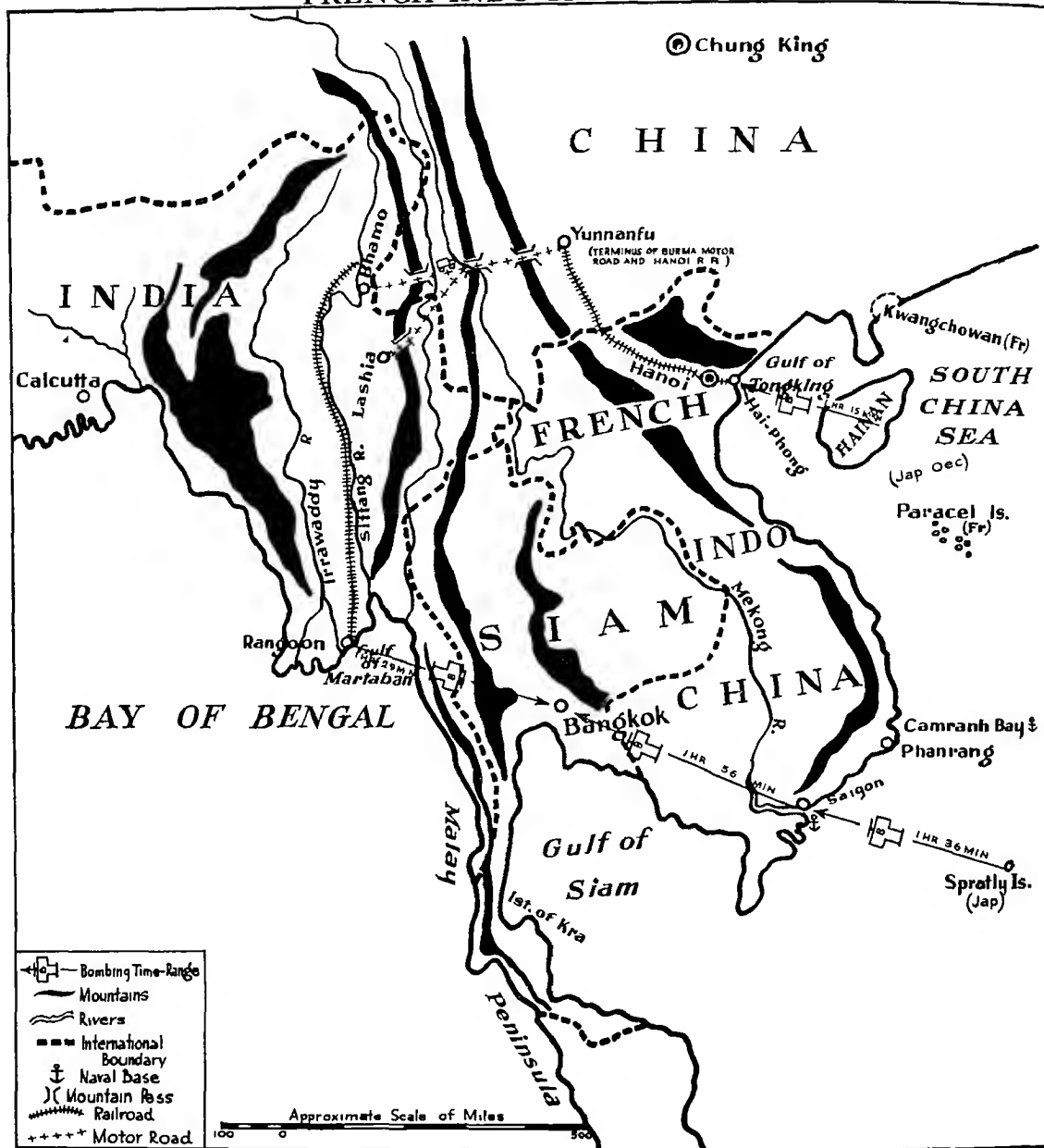
Volunteer forces exist both at Singapore and Hong Kong, of British subjects living there. Approximate totals 2,000, of all arms. Conscription is now being put into effect.

The above does not include small police garrisons in Borneo.

AIR ARMY (Royal Air Force detachments from India as needed).

Critical points in Malaya on the Hong Kong-Singapore line are the former, now within easy reach of Japanese aerial attack from Chinese bases, and Singapore, still 750 miles—3 hr. bombing time-range—from Spratly Island, Japanese sea-plane base. The Spratly Island base is highly important, as it lies on the China Sea almost equidistant from British North Borneo and French Indo-China, dominating the Hong Kong-Singapore sea lane and all maritime communication between the Indian Ocean and the China Sea. It should also be noted that should Siam be allied with or come under domination of Japan, her Kra area of the Malay peninsula would furnish an excellent base for aerial attack on Singapore. From Sungkla to Singapore is 470 miles—1 hr. 53 min. bombing time-range.

FRENCH INDO-CHINA - SIAM



BOMBING TIME RANGE TABLE

Siam is open to aerial attack from Indo-China, India, and South China, also from carrier based and seaplane aviation on the Bay of Bengal, Gulf of Siam and China Sea

To	From	Approximate Mileage	Elapsed Time
Bankok	Saigon (Fr)	480	1 hr 56 min
	Rangoon (Br)	370	1 hr 29 min
	*Singapore (Br)	900	3 hr 36 min
	*Ha-nan (Jap)	750	3 hr 00 min

*Excessive except for long range flying boats also feasible in the case of Singapore by shuttling between that place and Indo China dromes

Siam

ARMY (Conscript with professional cadres)



21 Battalions



13 Cavalry Regiments



8 Field Artillery Groups (battalions)



3 Antiaircraft Artillery Groups



Fortress troops

Peace strength 24,000

War strength 32,000

Air Corps (part of Army)



All types, total of 207 ships.

Value and strength of flying personnel unknown.

NAVY

2 Coast Defense ships



1 Destroyer and 12 Torpedo boats
(of which three obsolete)



4 Submarines

8 Coastal motor "suicide" torpedo
boats

Personnel 4,000

Note—Siam is of great military value to any nation or group of nations opposing an Anglo-French entente, since geographically it splits French Indo-China and British India. Some consideration has been given to a canal to be cut through the Malay peninsula on Siamese territory, at the Isthmus of Kra, by-passing Singapore and nullifying its importance. The more modern vessels of Siam's navy are Japanese-constructed; she has two additional cruisers under construction today in Italian yards.

French Indo-China

ARMY



1 Division



Detachment of Tanks



4 Squadrons (all classes) 40 ships

Composed of native and French troops—French colonial infantry and artillery, and the 5th Regiment of the Foreign Legion. See France.

BOMBING TIME-RANGE TABLE

Indo-China is open to aerial attack from India, Siam, China, Japanese possessions, East Indies and from carrier-based or sea-plane aviation in the China Sea and Gulf of Siam.

To	From	Approximate Mileage	Elapsed Time
Saigon	Spratly Is. (Jap.)	400	1 hr. 36 min.
	Singapore (Ind.) . . .	600*	2 hr. 24 min.
	Bangkok (Siam)	390	1 hr. 34 min.
Hanoi	Mandalay (Ind.)	630*	2 hr. 32 min.
	Hainan Is. (Sino-Jap) .	310	1 hr. 15 min.
	Yunnanfu (Chin.)	330	1 hr. 20 min.

*Long-range bombers and transport only.



BOMBING TIME-RANGE TABLE

Japan itself is partly open to aerial attack from Siberia and China, and is entirely open to attack from carrier-based planes and from seaplanes on the Pacific Ocean, Sea of Okhotsk, Sea of Japan and Yellow and East China Seas. Formosa is open to aerial attack from China and the Philippine Islands; Manchukuo and Chosen from both China and Russia and all are open to carrier-based aviation attacks.

To	From	Approximate Mileage	Elapsed Time	To	From	Approximate Mileage	Elapsed Time
Ominato	Vladivostok	520	2 hr 05 min	Harbin	Blagoveshchensk (Man)	340	1 hr 22 min
Tokyo	Vladivostok	680*	2 hr 43 min	Mukden	Vladivostok (Rus)	450	1 hr 48 min
Formosa	Hong Kong (Br)	550*	2 hr 12 min	Rashin	Vladivostok (Chosen)	100	24 min
Formosa	Loag (P I-US)	530*	2 hr 08 min				







* Long-range bombers only

Japan




Army and Navy are separate entities, under the Emperor. Air forces are components of both. Japan is today on a war footing.

ARMY (Conscript with professional cadres)

a. Regular Army. Basic organization:

	17 Divisions (war strength) ...	425,000
	4 Cavalry Brigades—cavalry elements are part of each Infantry division ...	20,000
	Tanks and other mechanized elements exist.	
	Anti-aircraft Arty. Corps	11,000
	Fortress Troops	15,000
	4 Brigades Heavy Artillery	10,000

Air Force—Squadrons

	11 Observation ..	165 ships
	11 Fighter	165 ships
	4 Bomber	40 ships
Total 1st Line		270 ships
2d Line, all types		800 ships
Total Army ships		1,070 ships






Personnel—

Military Pilots	1,500
Other ranks	11,000
	12,500



b. Reserves.

17 Divisions	425,000
--------------------	---------




c. Manchukuo Garrison—

	4 Divisions (Japanese) ..	80,000
	2 Cavalry Brigades ..	10,000
	2 Tank Regiments ..	2,100
	Fortress troops (est.) ..	5,000
Manchukuo levies (value doubtful):		
	20 Brigades	100,000
Total Manchukuo garrison		197,100

d. Chosen (Korea) Garrison:—

	2 Divisions	50,000
	Fortress Troops	

e. Formosa Garrison—

	3 Regiments Infantry	8,000
	Fortress Troops	
	Anti-aircraft	


Total 1,173,600


Note—Since Japan has been on an ever-increasing war-footing since July, 1937, with a large mobile army in China, and has kept a rotating mobilization in effect to maintain her units in China at war strength, the above would seem to be a fair estimate of the force she can keep in the field.


e. Territorial Reserve. Mobilizable in M + 30 days, 1,000,000.

NAVY


(Known vessels, from all available sources. That Japan may have constructed additional capital ships is quite possible)


	10 Battleships (4 additional under construction?) including <i>Hiyei</i> demilitarized for training purposes and stated to have been restored to strength since expiration of London Treaty.
---	--

	12 Heavy Cruisers
---	-------------------

	25 Light Cruisers (including 2 ex-Chinese) (7 more building)
---	--


5 Coast Defense ships (old)

	112 Destroyers (10 additional building)
---	---

	5 Airplane (carriers) (2 additional building).
---	--

3 Seaplane carriers (2 additional building)

2 Aircraft Tenders.

	70 Submarines (probably more)
---	-------------------------------


Naval Air Force—

(Squadron organization unknown)

Estimated total of 600 patrol planes (flying boats) and 400 carrier-based land planes, making total in 1st line, Naval Air Force, of 1,000 ships

(Continued on next page)

Japan (Continued)


 2nd Line Naval Air Force,
including obsolescent types 1,000 ships

Total all classes 2,000 ships
Naval personnel (including 1,200 military pilots):—
Active 107,000
Reserve 53,000
Total 160,000

Note—Bearing in mind the high percentage of patrol boats and the availability of carriers, seaplane carriers and aircraft tenders it will be noted that Japanese naval aviation is peculiarly fitted for national strategy of a maritime nation with wide-flung island outposts.


Syria

French mandate, under French military control for defense. Note that Tripoli is outlet for French oil pipe-lines from Iraq.

 1 Division (reinforced) 16,000

ARMY

a. *Regular Army* (French troops, included under France q. v., and Levant Force, recruited locally)

 5 Cooperative squadrons (From French Air Army q. v.)


Palestine

British mandate, under British military control for defense. Note that Haifa is outlet for British oil pipe-lines from Iraq.

 1 Division (reinforced) 20,000

ARMY

a. *Regular Army* (British troops included under Great Britain q. v.)

 4 Cooperative squadrons (from Air Army, Great Britain, q. v.)

BOMBING TIME-RANGE TABLE

Palestine is open to aerial attack from her neighbors, from Turkey, from Italian Mediterranean bases (with difficulty) and from carrier-based and seaplane aviation in the Mediterranean Sea.


To	From	Approximate Mileage	Elapsed Time
Haifa	*Samos (It.)	650	2 hr. 36 min.
	*Tobruk (It.)	670	2 hr. 41 min.
Jerusalem	*Rhodes (It.)	550	2 hr. 12 min.


**Probable only by use of seaplanes shuttling to tenders.*

Trans-Jordan

British mandate, under British military control for defense.

ARMY

 a. *Regular Army*. Trans-Jordan Frontier Force, amounting to approximately one regiment, horse and mechanized, 1,100.

 1 Cooperative squadron (from British Air Army, q. v.)

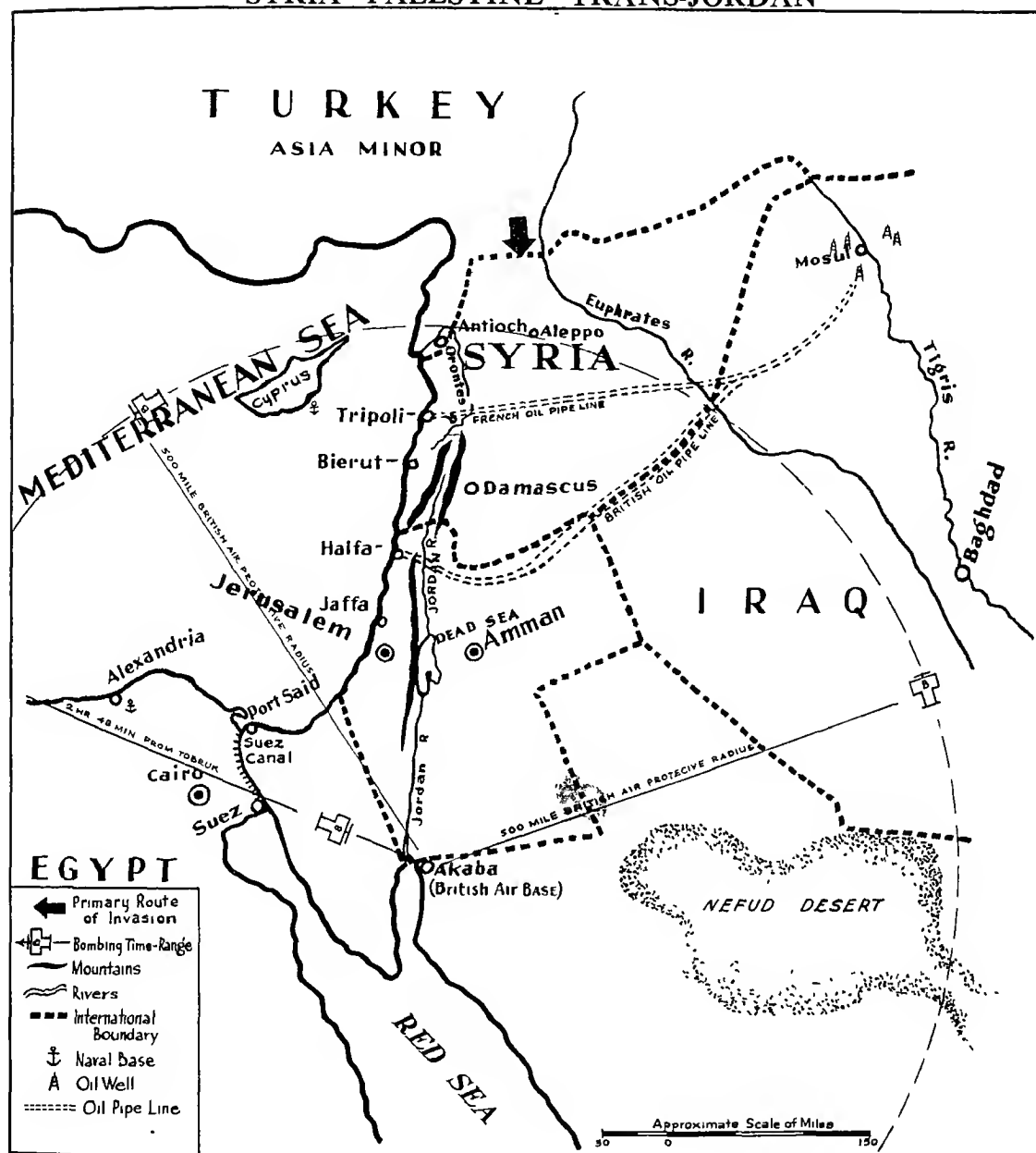
Note—Trans-Jordan force is available for use in Sinai Peninsula, into which British and Egyptian units may be sent from Cairo, for defense of the east bank of the Suez Canal. Royal Air Force units based in Trans-Jordan, Palestine or Egypt perform normal reconnaissance functions in the Sinai.

BOMBING TIME-RANGE TABLE

Trans-Jordan is open to aerial attack from her neighbors and from carrier-based and seaplane aviation on the Mediterranean and Red Seas.

To	From	Approximate Mileage	Elapsed Time
Aquaba	...Tobruk (It.)	720	2 hr. 53 min.

SYRIA-PALESTINE-TRANS-JORDAN



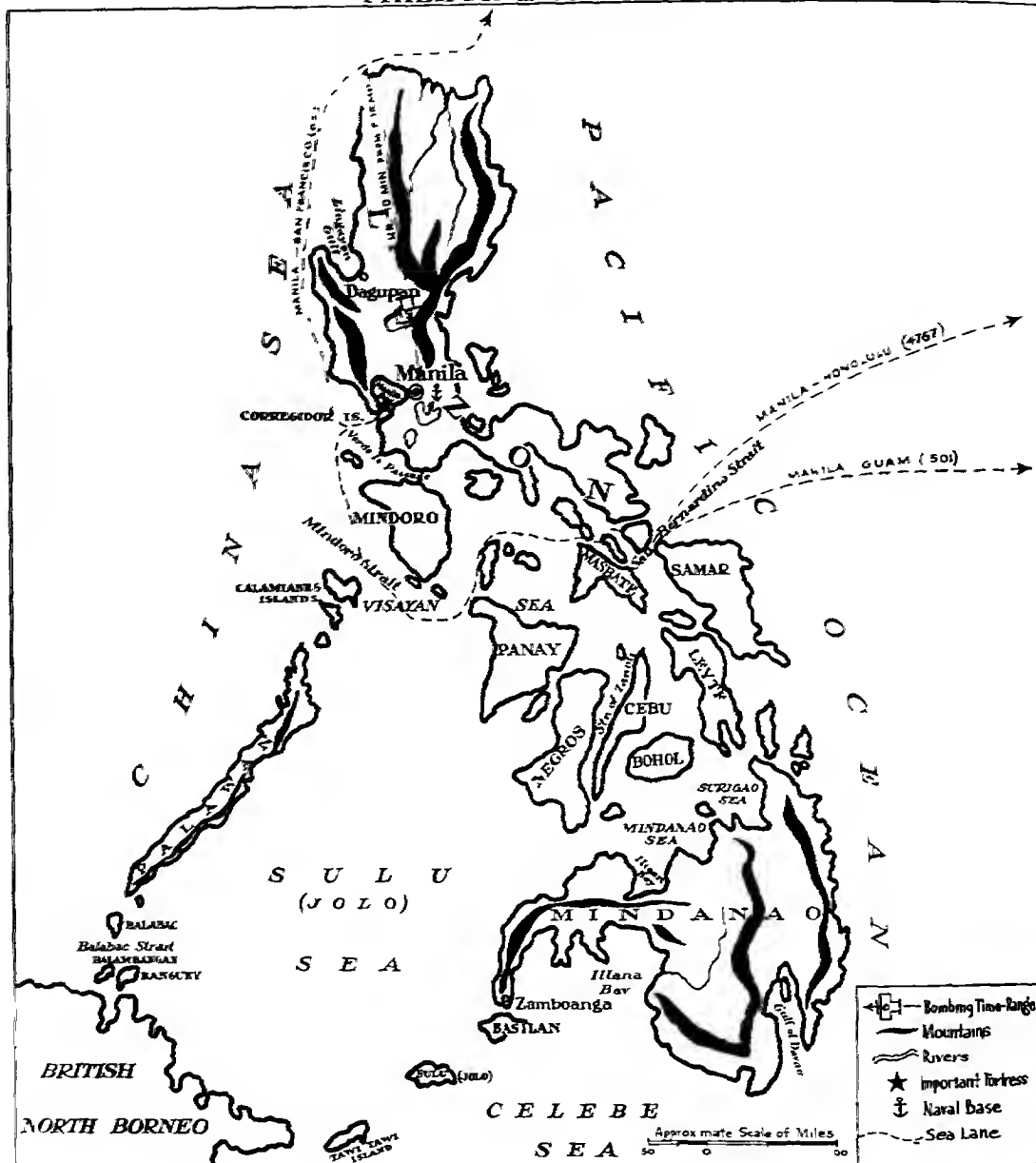
BOMBING TIME-RANGE TABLE

Syria is open to aerial attack from Turkey, Iraq, Palestine, Trans-Jordan, Italian bases (with difficulty) in the Dodecanese and Libya and from carrier-based and seaplane aviation in the Mediterranean Sea

To	From	Approximate Mileage	Elapsed Time
Tripoli	*Samos (It)	600	2 hr 24 min
Beirut	Rhodes (It)	500	2 hr 00 min
	*Tobruk (It)	720	2 hr 53 min
Aleppo	Kaysaria (T)	230	56 min

*Probable only by use of seaplanes shuttling to tenders

PHILIPPINE ISLANDS



BOMBING TIME RANGE TABLE

Manila and the harbor defenses of Manila and Subig Bays constitute the key points of defense. They are open to long range aerial attack from Formosa, Borneo, certain Japanese owned or mandated islands, and from carrier based or sea plane aviation on the China and Celebes Seas and Pacific Ocean.

To	From	Approximate Mileage	Elapsed Time
Manila	Formosa (Jap)	540*	2 hr 10 min
	North Borneo (Br)	650*	2 hr 36 min
	Spratly Is (Jap)	820*	3 hr 17 min

* Long-range bombers only

Note—As shown on the map within the circles, many islands lie within bombing range of the island of Luzon, which might be occupied as temporary advance bases by long range flying boats (patrol planes) from which to make assault. Shutling operations are thus facilitated.

Philippine Islands

Defense of the Islands at the present time is a responsibility of the United States, regardless of present or future political status.

ARMY

a. *U. S. Regular Army* (q. v.) (including 6,000 Philippine Scouts)—



1 Division (reduced strength)



1 Cavalry Regiment



Fortress troops—Coast artillery, fixed and mobile (including anti-aircraft, etc.)

9,500

b. *Air Corps*

Elements of U. S. Army Air Corps q. v.

c. *Philippine Commonwealth Army*

Now in process of organization; approximate present strength under arms	30,000
Total	39,500

NAVY

a. *U. S. Navy* (q. v.) *Asiatic Fleet*.



2 Light cruisers

4 Gunboats (and 6 river gunboats in Chinese waters)



13 Destroyers



6 Submarines

b. *Philippine Commonwealth*.

Several Coast Guard cutters, negligible in fighting strength.

SIBERIA



BOMBING-TIME-RANGE TABLE

Siberia is partly open to aerial attack from Japan, Iran, India, Afghanistan, Manchukuo, Chosen, and from carrier-based aviation in the Sea of Japan.

To	From	Approximate Mileage	Elapsed Time	To	From	Mileage Approximate	Elapsed Time
Vladivostok	Ominata (Jap.)	500	2 hr 00 min.	Tashkent	Kabul (Afgh.)	480	1 hr. 56 min.
	Kirin (Manch.)	290	1 hr. 10 min.	Tashkent	Peshawar (Ind.)	*540	2 hr. 10 min.
	Rashin (Chosen)	50	12 min.	Bokhara	Kabul (Afgh.)	470	1 hr. 53 min.
Komsomolsk	Aigun (Manch.)	480	1 hr 56 min	Krasnovodsk	Teheran (Iran.)	330	1 hr. 20 min.
Blagovschensk	Aigun (Manch.)	20	05 min.	*By long range planes only.			
Chita	Manchuli (Manch.)	245	58 min	Note—Shuttling over Vladivostok area between bases in Japan, Chosen and Manchukuo is quite feasible.			






Siberia

Union of Soviet Socialist Republics

Available forces listed below are included in U.S.S.R. strength tables on pages 51, 52 q. v.

ARMY

a. *Regular Army—1st and 2d Far Eastern Red Banner Armies.*

	15 Divisions	225,000
	7 Cavalry Divisions	120,000
	Tank Corps (approx. 1,000 armored vehicles)	5,000
	Fortress Troops	25,000
	15 Regiments, and area defense force	15,000
	Total	390,000

b. *Reserve and Territorial Force.*

Composition unknown

1st Army Hq. is at Vladivostok; 2d Army Hq. at Khabarovsk.

NAVY



18 Destroyers



90 Submarines

80 Coastal motor boats

Amur River Flotilla—

32 Gunboats

75 Armed motor boats

Personnel (est)

AIR ARMY



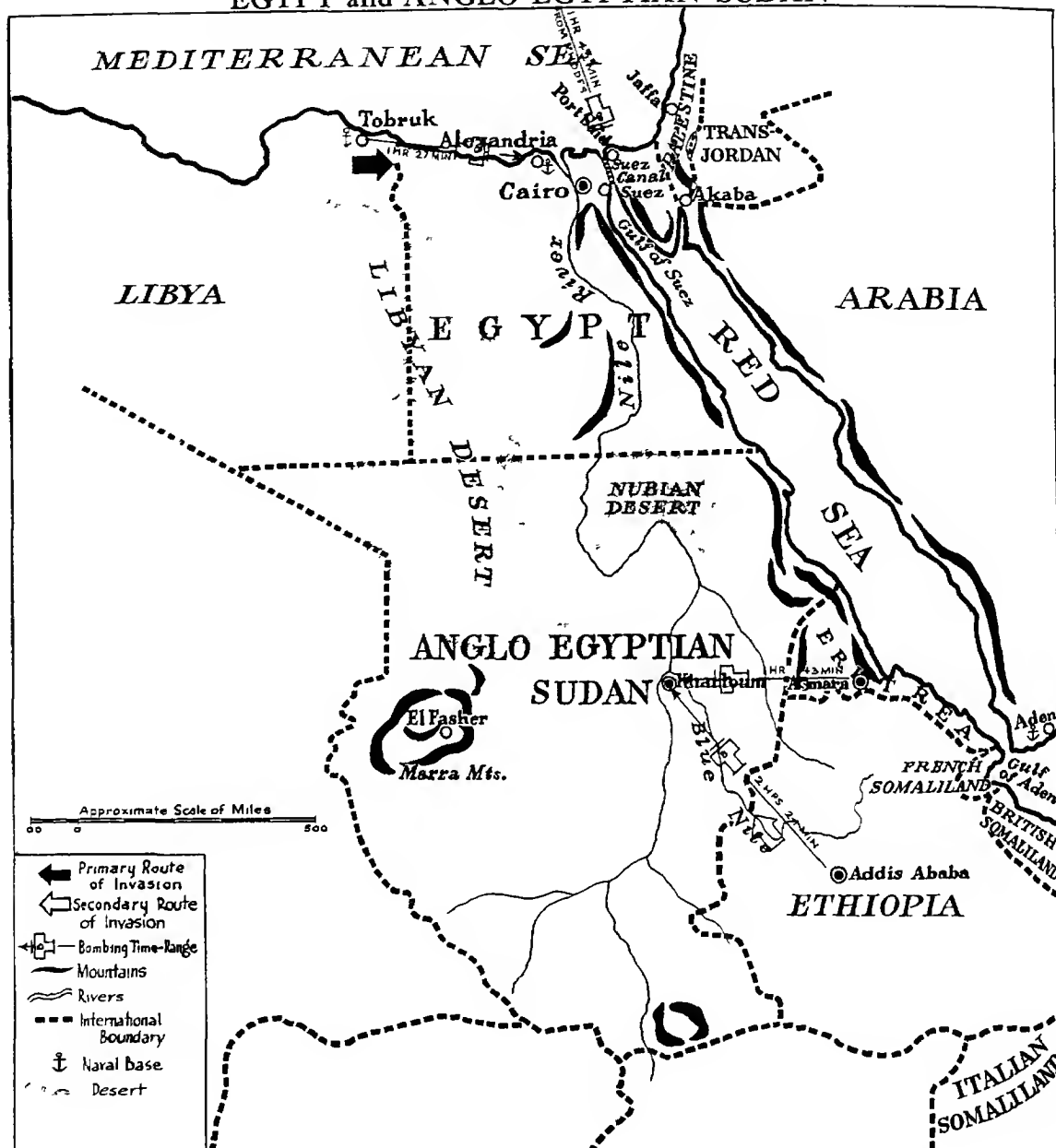
Approximately 1/3 of total Air Army strength q. v.

Note—Air forces not being dependent upon rail or motor roads, reinforcement from bases west of the Ural Mountains depends only upon necessities of the moment.

Study of the adjoining map shows the network of motor, rail and river communications being built up north of the Sino-Mongolian border to support defense of Siberia, particularly the so-called Maritime Provinces (Eastern Siberia), against Japanese invasion. Far East naval bases are Vladivostok and Komsomolsk, with auxiliary bases at Nikolaevsk, Okhotsk, Petropavlovsk on Kamchatka, and Possiet Bay. Principal Far East air bases are Chita, Blagoveshensk, Khabarovsk and Komsomolsk.

In any struggle between Japan and the U.S.S.R. it would be imperative for the former to destroy Russian bases at Vladivostok, Possiet Bay and Okhotsk, prior to large transport movements in the Sea of Japan, because of danger of submarine and aerial attack.

EGYPT and ANGLO-EGYPTIAN SUDAN



BOMBING TIME RANGE TABLE

Egypt and the Anglo-Egyptian Sudan are open to attack from Libya, Italian East Africa, Italian Mediterranean bases, Turkey, and from carrier-based and seaplane aviation on the Mediterranean and Red Seas

To	From	Approximate Mileage	Elapsed Time	To	From	Approximate Mileage	Elapsed Time
Port Said	Rhodes (It)	425	1 hr 42 min	Cairo	Tobruk (It)	450	1 hr 48 min
	Tobruk (It)	490	1 hr 58 min		*Nearest point on Eri		
	Alexandretta (T)	430	1 hr 43 min		trean coast (It)	800	3 hr 12 min
Alexandria	Tobruk (It)	360	1 hr 27 min	Khartoum	Addis Ababa (It)	600	2 hr 24 min
	Rhodes (It)	365	1 hr 28 min		Asmara (It)	430	1 hr 43 min

*Feasible by shuttling seaplanes to tender, working out of Assab




Egypt and Anglo-Egyptian Sudan

The former, an independent kingdom, under alliance with and its defense guaranteed by Great Britain; and the latter, claimed by Egypt and governed by a Governor General appointed by Egypt (with British approval), its defense also guaranteed by Britain, must be considered as an entity for military purposes. The Suez Canal, of which Company the British Government holds nearly one half of the shares, lies in Egyptian territory. The Canal, by the Convention of Constantinople, 1888, signatories Britain, France, Germany, Austro-Hungary, Italy, Netherlands, Russia, Spain and Turkey, is theoretically open to all nations and free from blockade. During the World War it was an integral part of Allied terrain, German operations were directed against it, and Britain closed it for a period in 1915. War vessels pay toll to traverse it just the same as civilian vessels. Its possession will be a moot point in any future major warfare, since it is one of the vital elements of British communications to the East, and essential to Italy's communication with her East African possessions. British control in wartime is assured by the bases of Port Said on the Mediterranean and Aden on the Red Sea and by control of both banks. The British treaty with Egypt limits normal British military strength to 10,000 men and 400 airplanes, and the possession of Alexandria and Port Said as naval bases.




ARMY

a. Regular Army.


(1) British troops (included in total of Great Britain, q. v.)

	2 Brigades (4 battalions each)	} 10,000
	1 Cavalry Brigade	
	Fortress Troops (including artillery, antiaircraft, engineers, etc.)	

(2) Egyptian Army (British trained).

	3 Brigades	} 20,000
	2 Squadrons of Cavalry	
	14 Armored Car Groups	
	Elements of other arms in training	

(3) Sudan Defense Force (British officers, native troops).

	1 Brigade, mixed, cavalry, camel corps, infantry	5,000
Total strength		35,000



b. Reserves (Egyptian)

Trained but unorganized in units 80,000

Potential War Strength 115,000
NAVY (See Great Britain)

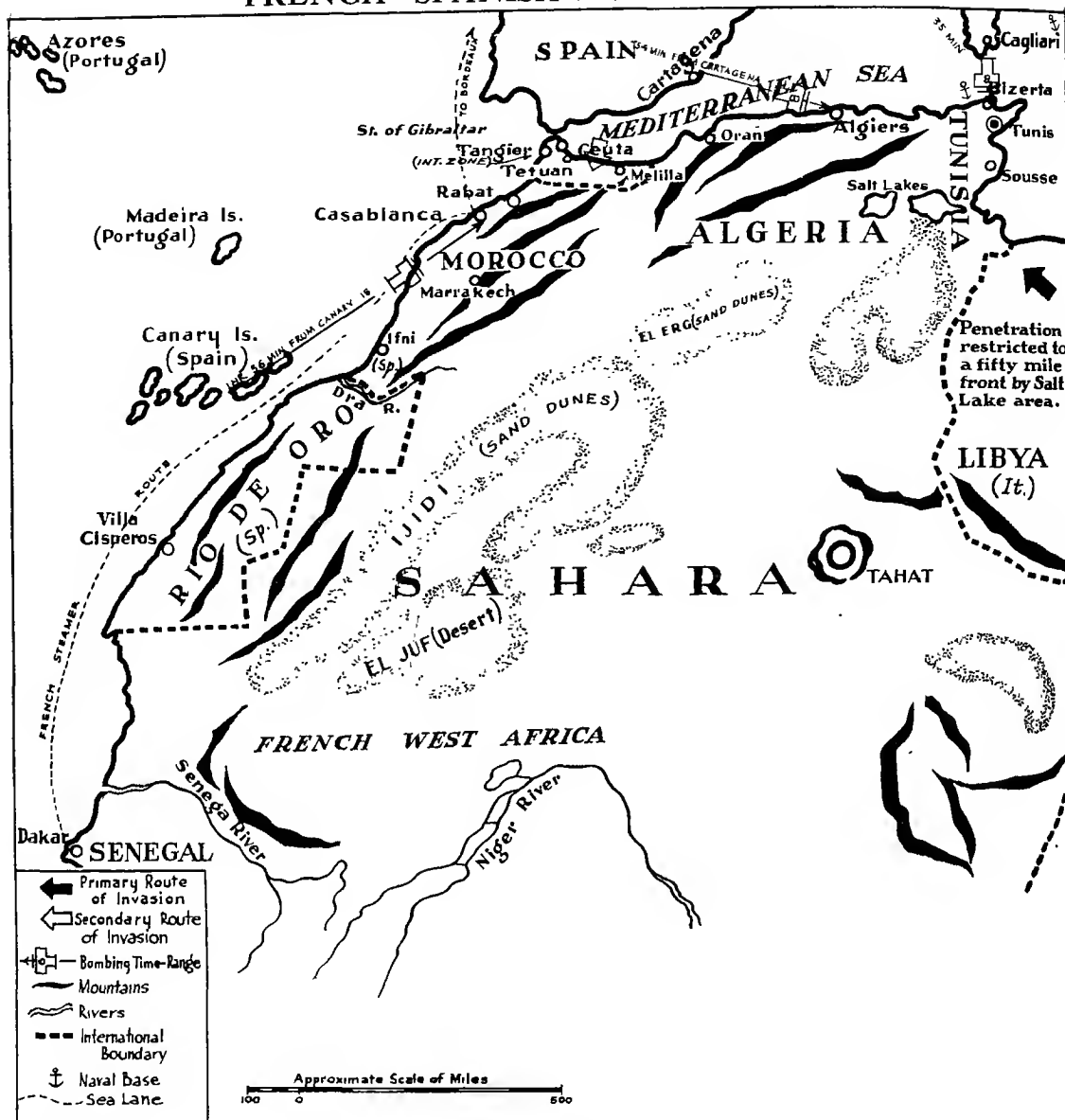
AIR ARMY

a. British Royal Air Force (q. v.). Elements of the Mediterranean Air Command; strength fluctuates in accordance with situation. Basic approximation—Squadrons—

	10 Bomber
	5 Cooperative (attached to Army)

b. Egyptian Air Force.
In process of formation.

FRENCH - SPANISH NORTH AFRICA



BOMBING TIME-RANGE TABLE

The entire French North African area is open to aerial attack from Spain, Spanish Morocco and the Spanish colonies of Rio de Oro and Ifni; from Italy and Italian North Africa, and from the Canary Islands. The Balearics provide operating bases against maritime routes between France and Africa in the Mediterranean; the Azores and Canaries dominate the Atlantic routes. Shutling operations are feasible between all these potential hostile air bases.

To	From	Approximate Mileage	Elapsed Time	To	From	Approximate Mileage	Elapsed Time
Casablanca	Canaries (Sp)	480	1 hr 56 min.	Philippeville	Cagliari (It)	215	51 min.
	Cadiz (Sp)	230	56 min.	Bizerta	Cagliari (It)	140	35 min.
	Ifni (Sp)	390	1 hr 34 min	Tunis	Marsala (It)	160	39 min.
	* Villa Cisneros (Sp)	870	3 hr 29 min	Sousse	Pantelleria (It)	90	22 min.
	Tetuan (Sp)	200	48 min	Constantine	Cagliari (It)	250	1 hr 00 min.
Marrakech	Ifni (Sp)	200	48 min	Sfax	Tripoli (It)	190	46 min.
Oran	Cartagena (Sp.)	150	36 min.	For: Saint	Tripoli (It.)	270	1 hr 05 min.
Algiers	Cartagena (Sp.)	225	54 min.	Dianet	Ubari (It.)	260	1 hr. 03 min.
	Majorca (Sp.)	200	48 min.				
	Cagliari (It.)	375	1 hr. 30 min.				







*Feasible if shuttling between another base, such as Canaries, Ifni, Spanish Morocco or Spain.

French North Africa


Algeria and Tunisia are French Colonies, practically a part of the mother country; Morocco (less the little strip of Spanish Morocco—see map) is a French protectorate. This entire area is considered as a military entity, part of France's Metropolitan forces, being the 19th Region of the Army, the 5th Region of the Air Army.

ARMY

a. *Regular Army* (included in global totals of Metropolitan Army, France, q. v.).

	7 Divisions (3 Algerian, 1 Tunisian, 3 Moroccan)	160,000
	1 Cavalry Division (equivalent)	
	Antiaircraft (detachments) ..	
	Tanks (detachments)	
	Fortress Troops	
	10 Cooperative Squadrons (attached from Air Army q. v.)	

b. *Reserves* (organized and mobilizable within 60 days).

	7 Brigades	14,000
War Strength		174,000




c. *Territorial Reserve*. Includes forces of the Moroccan Empire and tribal irregular units in Morocco, Algeria and Tunisia, of which probably 20,000 could be put in the field where needed as local partisan forces at once 100,000

Potential War Strength ... 274,000

d. Potential unorganized reserve, 600,000, not to be considered effective other than as replacement reservoir for native units in the Metropolitan Army.

NAVY (See France)

AIR ARMY (Part of Metropolitan Air Army, France, q. v.)
Squadrons—

	10 Bomber
	10 Fighter
	10 Cooperative (attached to Army)

Note—France's North African forces are organized on an essentially mobile footing, for use either in continental France or in Africa as need may be. Included in the regular units listed above is France's famous Foreign Legion, four regiments of infantry, one regiment of cavalry and one squadron of armored cars (the remaining Legion infantry regiment is in French Indo-China q. v.).

Spanish North Africa

Herein are included Spanish Morocco, a protectorate; and the colonies of Rio de Oro and Ifni. The two last-named are negligible so far as defensive forces are concerned. The former, original base of Franco's expedition into Spain, is a definite military entity worthy of consideration. Present strength of its basic military

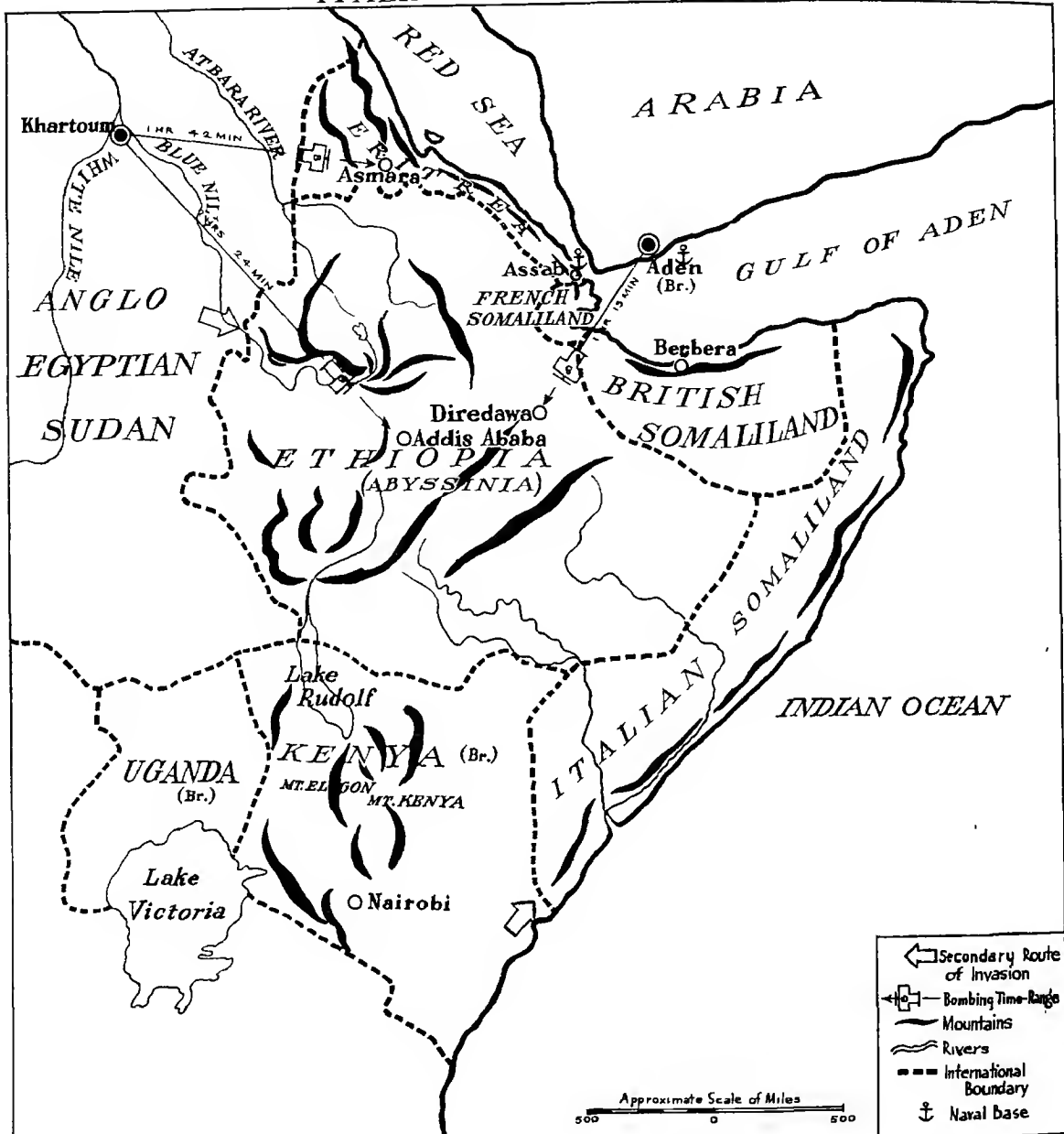
forces is not known. It may furnish a base for operations against French North Africa, though with the handicaps of being completely dominated by air and its inability to furnish either sustenance or material for an expeditionary force, which would have to depend upon Mediterranean maritime routes for supply.

BOMBING TIME-RANGE TABLE

To	From	Approximate Mileage	Elapsed Time	To	From	Approximate Mileage	Elapsed Time
a. Spanish Morocco				b. Ifni.			
Ceuta	Gibraltar (Br.)	50	12 min.	Alcazar-	Fez (Fr.)	75	18 min.
	Fez (Fr.)	130	32 min.	quivir			
Tetuan	Fez (Fr.)	100	24 min.	Ifni	Marrakech (Fr.)	200	48 min.
Melilla	Tlemcen (Fr.)	90	22 min.	c. Rio de Oro.			
Xauen	Fez (Fr.)	75	18 min.	Villa Cis-	Agadir (Fr.)	625	2 hr. 30 min.
Larache	Fez (Fr.)	85	20 min.	neros	*St. Louis (Fr.)	565	2 hr. 16 min.

*Probable only by flying boats or seaplanes operating from St. Louis in French West Africa.

ITALIAN EAST AFRICA



BOMBING TIME-RANGE TABLE

To	From	Approximate Mileage	Elapsed Time
Asmara	... Khartoum (Br.)	... 430	... 1 hr. 43 min
Addis	...	...	...
Ababa	... Aden (Br.)	... 435	... 1 hr. 45 min.
	* Khartoum (Br.)	... 600	... 2 hr. 24 min
	Berbera (Br.)	... 430	... 1 hr. 42 min
Dierdawa	... Aden (Br.)	... 310	... 1 hr. 15 min.





* Feasible by shuttling between Khartoum and Uganda, Kenya or British Somaliland.

Italian East Africa



Consists of Eritria, Ethiopia and Italian Somaliland, militarily grouped under one command.

ARMY

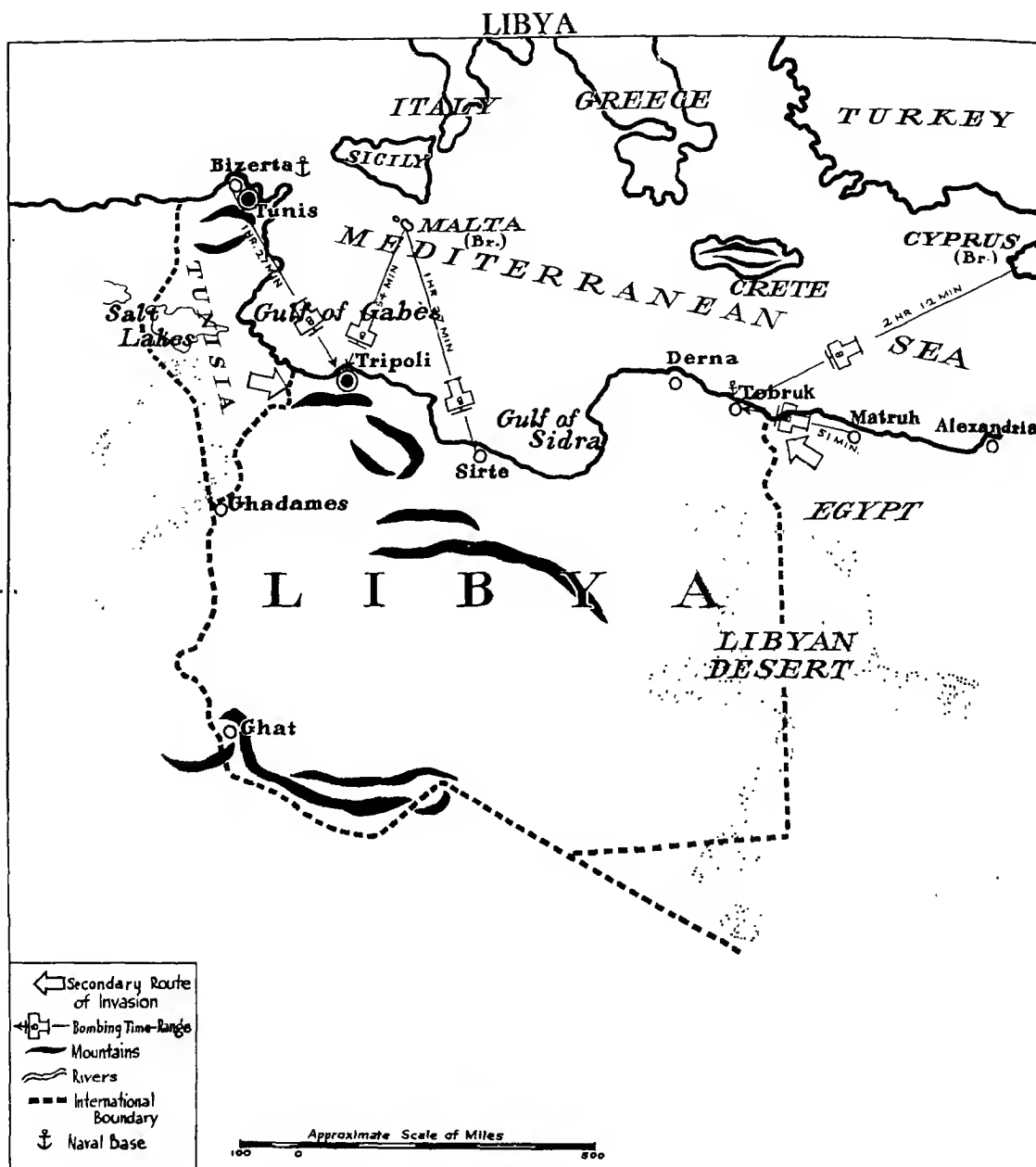
a Metropolitan (but not included in Italian totals, q v).

	1 Division (Savoia Grenadiers) completely motorized	12,000
	13 Black Shirt Battalions	13,000
	5 Groups Field Artillery (4 motorized)	2,500
	4 Groups Antiaircraft	2,000

b Native.

	17 Brigades of 4 battalions each	68,000
	6 Groups (squadrons) Cavalry	3,000
Total War Strength ..		100,500

*Native troops at present time not entirely reliable.



BOMBING TIME-RANGE TABLE

Libya is open to aerial attack from French North Africa, Egypt, Malta and from carrier-based and seaplane aviation in the Mediterranean Sea.

To	From	Approximate Mileage	Elapsed Time
Tripoli	Bizerta (Fr.)	360	1 hr. 27 min.
	Ben Gardane (Fr.)	115	28 min.
	Malta (Br.)	225	54 min.
Sirte	* Bizerta (Fr.)	575	2 hr. 18 min.
	Malta (Br.)	360	1 hr. 27 min.
Tobruk	Siwa (Br.)	225	54 min.
	* Cyprus (Br.)	550	2 hr. 12 min.
	Matruh (Br.)	210	51 min.

*Probably by seaplane, shuttling to tender, or from carrier shuttling to shore bases.

Libya



Italian colony in North Africa. Terrain is fertile for short distance only from coast; the remainder of the country desert. Libya cannot support the military forces present; all supply—in some parts even water—must be transported from Italy. Excellent road system parallels the shore.

An indefinite number of Black Shirt brigades, apparently relieved for training; probably not more than 2 present at any one time, approximately 10,000





Approximate War Strength 109,500

ARMY

a. Metropolitan units.

	4 Divisions light, semi-motorized; 8 regiments of regular line infantry, with 1 additional battalion of Fascist Militia—Black Shirts—attached to each; divisional artillery made up from 2 regiments of regulars, motorized, and additional Black Shirt units ..	40,000
	2 Antiaircraft mobile groups ...	2,500

b. Colonial (natives and Italian subjects resident in Libya).




	4 Divisions (equivalent), approximately	40,000
	1 Cavalry Division (motorized and horse)	5,000
	Tank Detachments	2,000
	Fortress Troops	10,000

NAVY (See Italy)

AIR ARMY

A part of Metropolitan Air Army, Italy, q. v. The Libyan strength is constantly fluctuating in accordance with the situation—home-land bases being within comparatively easy flying range. Tripoli, for instance, is but 360 flying miles from Palermo. It may be taken for granted that the effective air strength is never less than—

Squadrons—

	12 Bomber
	14 Fighter
	10 Cooperative (attached to Army)

UNION of SOUTH AFRICA



BOMBING TIME-RANGE TABLE

South Africa is partly open to aerial attack from Angola and Mozambique, and from carrier-based and seaplane aviation on the Atlantic and Indian Oceans.




To	From	Approximate Mileage	Elapsed Time
Pretoria	... Lourenco Marquez (Port)	290	.... 1 hr. 10 min.
Durban	... Lourenco Marquez (Port)	280	.... 1 hr. 07 min.

Union of South Africa

One of the components of the British Commonwealth of Nations. It includes Natal, Cape of Good Hope, and the former Transvaal and Orange Free State.

ARMY

a. Militia, with professional cadres.

	3 Brigades	}	Peace Strength	1,000
	6 Cavalry Regiments			
	2 Armored Trains		War Strength	20,000

b. Reserves—

Trained manpower, unorganized,
approximately 140,000

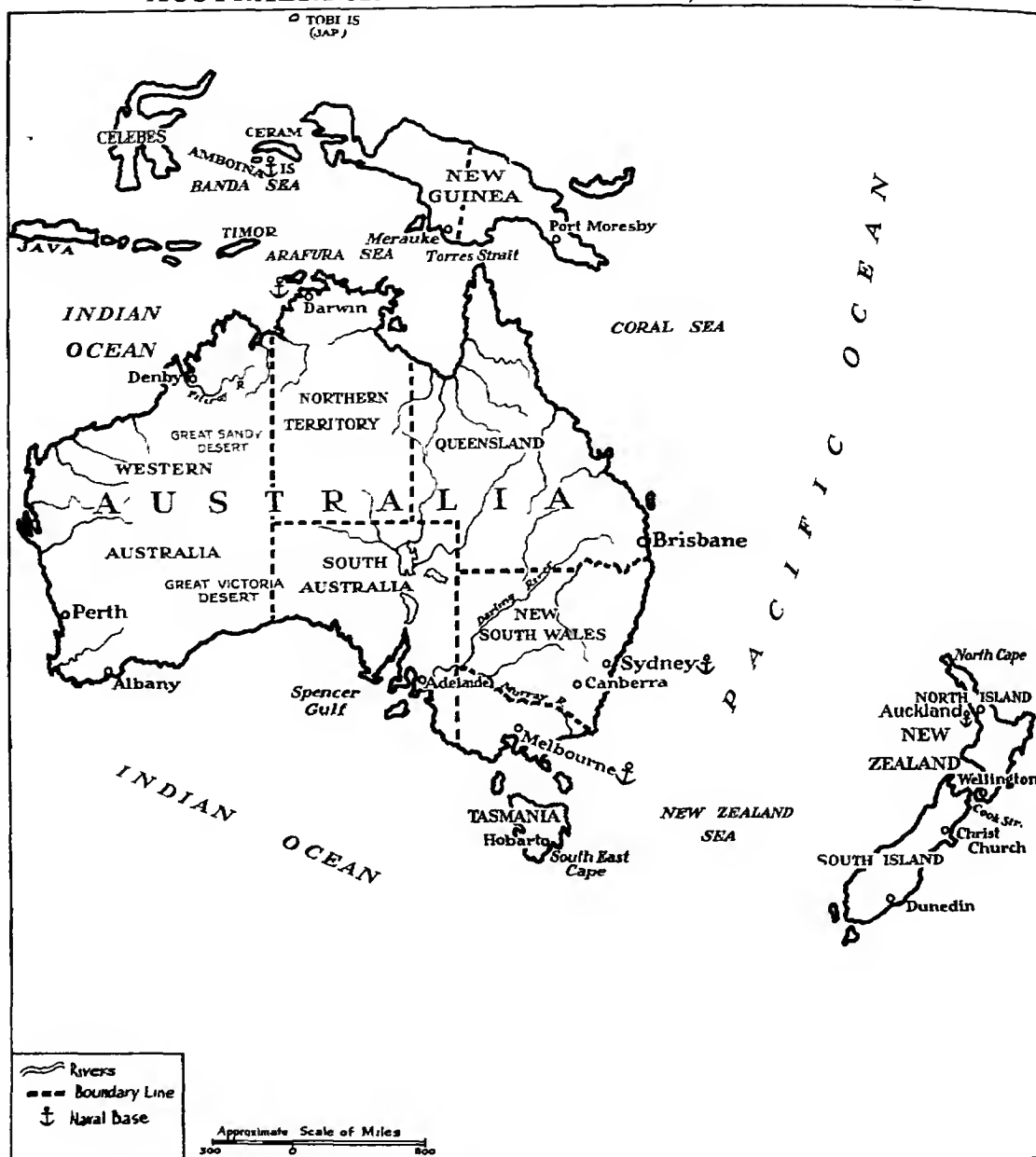
c. The following British African elements, while not included in Union of South Africa, must be considered as part of the Empire defense forces:—

- (1) King's African Rifles (East Africa)—
4 Battalions, war strength, approx. 4,500
- (2) Royal West African Defense Force—
1 Brigade (mixed), war strength, approx. 7,000

NAVY (See British Navy)

AIR ARMY (See British Royal Air Force)

AUSTRALIA AND NEW ZEALAND, AND PACIFIC



BOMBING TIME-RANGE TABLE

These countries are theoretically open to attack from Japanese mandated islands and from Dutch East Indies. Distances are enormous. The most definite potential aerial threat would be from carrier-based or long-range seaplane aviation, utilizing extemporized bases in the outlying islands.

To	From	Approximate Mileage	Elapsed Time
Port Darwin	Tobu, Caroline Is (Jap)	1,100	4 hr 24 min
	Amboina (Neth)	700	2 hr 48 min
	Timor (Port)	430	1 hr. 48 min.




Australia and New Zealand, and Pacific

The area includes Australia, New Zealand, British New Guinea (part of Australia) and the wide-spread island groups of Melanesia and those islands stretching eastward across the Pacific (excepting Japanese mandated islands and the French Taumoto group).




ARMY

a. *Regular Army* (Volunteer militia with professional cadres).

(1) Australia.

	4 Divisions and 3 mixed brigades	} Peace Strength 1,500 War Strength 31,500
	2 Cavalry Divisions	
	Fortress Troops	

(2) New Zealand.

	1 Division	} Peace Strength 600 War Strength 5,600
	3 Cavalry Brigades	
	Fortress Troops	





Total War Strength,
permanent force ... 37,100

b. *Reserves*. Potential, trained in part.

(1) Australia	525,000
(2) New Zealand	125,000

Potential War Strength 687,100

NAVY (Included in totals of Navy, Great Britain, q. v.)

	2 Heavy Cruisers (Australian)
	3 Light Cruisers (1 Australian, 2 loaned to New Zealand)
	5 Destroyers (Australian)
	2 Sloops (Australian)
	1 Aircraft Tender (Australian)

Personnel—

Australian	9,200
New Zealand	1,200
Total	10,400

AIR ARMY

a. Australia (Royal Australian Air Force)

Squadrons—

4 Mixed (fighter and bomber) ... } Approx. 60
3 Reserve (Citizens' Air Force) .. } operating ships

b. New Zealand (Royal New Zealand Air Force)
In process of organization.

c. Royal Air Force (Great Britain, q. v.).

Detachments of Fleet Air Arm, including patrol planes (long range flying boats), and of Far Eastern Air Command.

CANADA—ALASKA



BOMBING TIME RANGE TABLE

Canada is initially open to aerial attack from carrier-based or seaplane aviation only, except for possibility of hostile advance bases seized by an enemy, or from the U S in counter attack against such thrust

To	From	Approximate Mileage	Elapsed Time
Halifax	Battle Harbor	700 ⁺	2 hr 48 min
Quebec	Battle Harbor	850 ⁺	3 hr 24 min
Esquimalt	Sittka	920	3 hr 41 min
COOPERATIVE REINFORCING TIME FROM U S			
Halifax	Bingor, Me	260	1 hr 03 min
Battle Harbor	Bingor, Me	850 ⁺	3 hr 24 min
St Johns (N F)	Bingor, Me	820	3 hr 17 min
Vancouver	Ft Lewis, Wash	175	42 min
Winnipeg	Fargo, N D	225	54 min

Feasible only by long range bombers or seaplanes




Canada

One of the Dominions of the British Commonwealth of Nations. Its forces are armed, equipped and trained in accordance with the remainder of the British Empire.



ARMY

(Militia with permanent cadres)

a. Permanent Active Militia.

	3 Battalions	} ... 4,000
	2 Cavalry Regiments	
	Fortress and technical troops	

b. Nonpermanent Active Militia.

	26 Brigades	} ... 48,000
	3 Cavalry Brigades	

Total peace strength mobilizable in 14 days .. 52,000

c. Reserves.

Trained man power, to fill above units to war strength, mobilizable in 2 months .. 41,000

War strength 93,000

(Note—Canada has a potential man power of 800,000.)

NAVY




(Part of British Navy, q. v.)

4 Destroyers. Personnel, 1,091.

AIR ARMY

(Royal Canadian Air Corps)

Squadrons

	6 Bomber	} .. approx. 150 ships
	2 Fighter	
	6 Reconnaissance	


Alaska

Alaska, a territory of the United States, is separated from the mother country by the Dominion of Canada. Militarily it is a part of the 9th Corps Area.

Note—Expansion of the garrison, with objective the establishment of a naval and air base, is under consideration. The Aleutian Islands, jutting westward from Alaska, would thus become the northern flank of U.S. Pacific naval defensive area, with the Hawaiian Islands its center, and the Panama Canal Zone its southern flank.

ARMY

(Detachment of U. S. Regular Army)

	1 Battalion (with 2 additional companies)	600
---	---	-----

BOMBING TIME-RANGE TABLE

Alaska is open to aerial attack from Siberia (U. S. S. R.), the northernmost islands of Japan, and British Columbia, and from carrier-based or seaplane aviation in the North Pacific Ocean.

To	From	Approximate Mileage	Elapsed Time	To	From	Approximate Mileage	Elapsed Time
Dutch Harbor,				Attu Isl.			
Aleutian Is.,				(westernmost of			
Petropavlovsk (Sib.)	1200*	4 hr. 48 min.		Aleutian group)	Paramushiro Jima		
Uellen (Sib.)	900*	3 hr. 36 min.		(northernmost island			
Nome	Uellen (Sib.)	225	54 min.	of Japan)	750*	3 hr. 00 min.	
				Dutch Harbor	Attu Isl.	900*	3 hr. 36 min.
				Sitka	Dutch Harbor	1150*	4 hr. 36 min.
				Esquimalt (Br. Col.)	800*	3 hr. 12 min.	

*Above distances, most of them not feasible as round trips, are given as examples of potential aerial stepping-stones in any hostile eastward move towards our Pacific coast.

MEXICO



BOMBING TIME RANGE TABLE

Mexico is open to aerial attack from Central America (in part), and from carrier based and seaplane aviation on the Pacific Ocean, Gulf of Mexico and Caribbean Sea

Central America is open to aerial attack from Mexico (in part) and from carrier based and seaplane aviation as above

To	From	Approximate Mileage	Elapsed Time	To	From	Approximate Mileage	Elapsed Time
Mexico City	Magdalena Bay	860	3 hr 27 min	Vera Cruz	Brownsville, Tex	470	1 hr 53 min
Vera Cruz	Guatemala City	475	1 hr 54 min	Guatemala City	San Salvador	115	28 min
	Belize (Brit Hon)	520	2 hr 5 min	Managua	San Jose (Costa R)	215	52 min
Co operative reinforcing time from U S dromes				(Nic)	Coiba Is (Pan)	435	1 hr 45 min
Mexico City	Brownsville, Tex	460	1 hr 51 min	†San Juan del Sur			
Magdalena Bay	San Diego, Calif	620*	2 hr 29 min	(Nic)	Coiba Is (Pan)	370	1 hr 29 min
Tampico	Brownsville, Tex	250	1 hr 00 min				

BOMBING TIME-RANGE TABLE





To	From	Approximate Mileage	Elapsed Time	To	From	Approximate Mileage	Elapsed Time
†San Juan del Norte (Nic.)	Coiba Is. (Pan.)	265	1 hr 4 min.	Managua (Nic.)	Colon (C. Z.)	460	1 hr. 51 min.
San Juan del Norte (Nic.)	Belize (Brit. Hon.)	525	2 hr. 6 min.	Coiba Isl. (Pan.)	Colon (C. Z.)	185	45 min.
San Jose (CostaR.)	Galapagos Is. (Ec.)	950*	3 hr. 48 min.	* Feasible only for very long range bombers or by shuttling operations.			
				† Respectively Pacific and Atlantic termini of proposed Nicaraguan Canal.			

Mexico


Army and Navy are jointly under control of Secretariat of National Defense.

ARMY

a. Regular Army.

	50 Battalions	} Peace strength 56,000 War strength 150,000
	40 Cavalry Regiments	
	1 Antiaircraft Artillery Battery	
	2 Field Artillery Regiments	

b. Air Corps (component of Army).

	6 Squadrons, all types. approx. 100 ships
---	---

Personnel:—(included in figures above)

Military Pilots	200
Other ranks	500
Total	700

c. Reserves.

While the nation contains a large number of men who have seen military service of some sort or other, no organized reserve force exists. Potential man power, approx. 1,500,000.

d. National Guard.

Service is nominally obligatory, but in fact the force exists in almost negligible strength—approx. 5,000.

NAVY

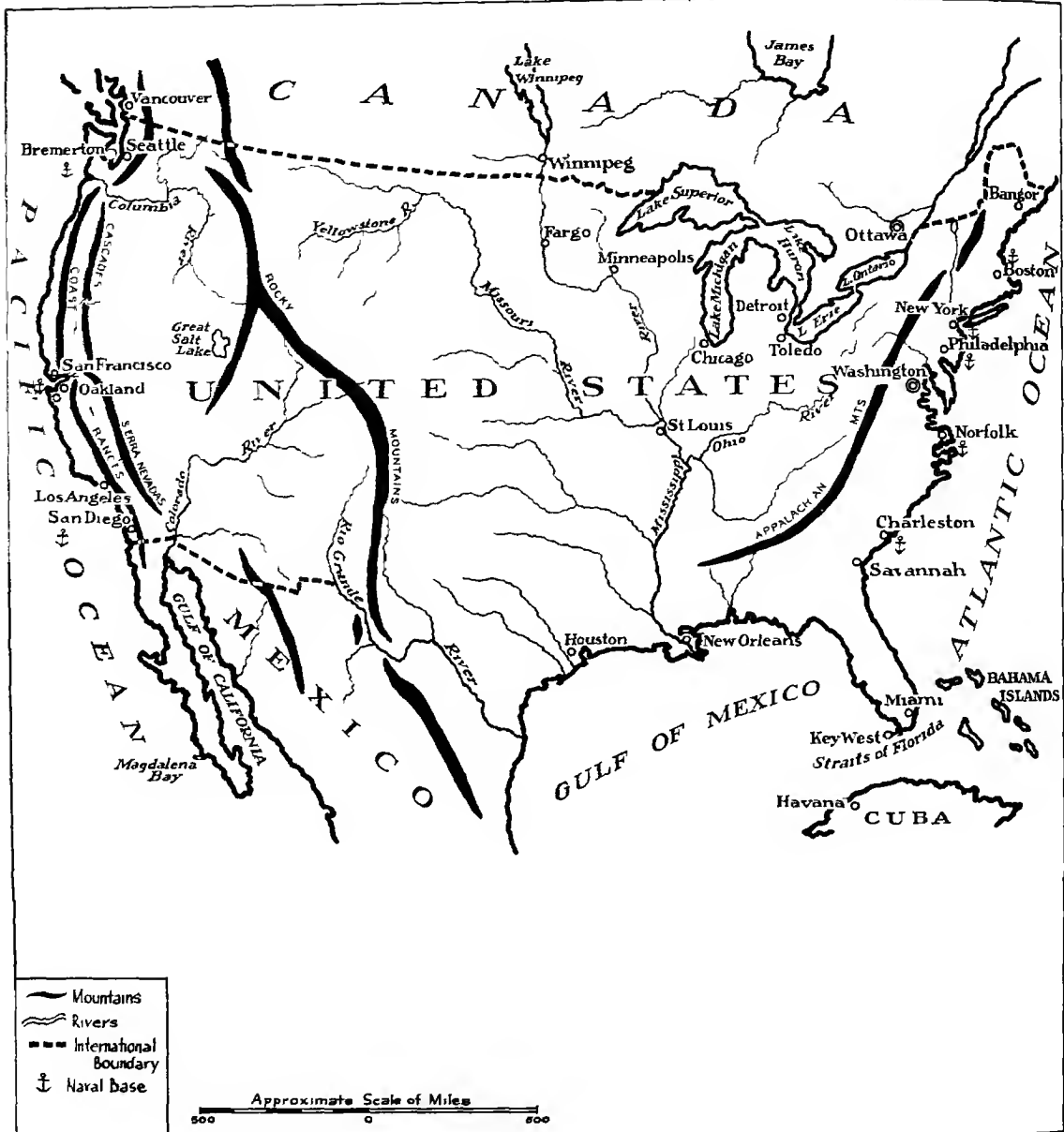
Negligible.

Central America

The nations of this area are too weak militarily for any detailed consideration of their armed strength. The terrain involved, however, is essential to any study of military geography relating to hemisphere defense. The countries involved—Guatemala, Honduras, Salvador, Nicaragua, Costa Rica and Panama, and the colony

of British Honduras, offer potential advance bases for powerful expeditionary forces threatening Mexico and the United States, the Panama Canal, the Caribbean area, and South America. The United States is particularly interested in a possible Nicaraguan Canal.

UNITED STATES



BOMBING TIME RANGE TABLE

The continental United States is open to aerial attack primarily only from carrier based aviation on the Atlantic and Pacific Oceans. It is potentially open to attack from bases which might be seized by an aggressor nation within the boundaries of her neighbors on the north and south.

To	From	Approximate Mileage	Elapsed Time
San Diego	Magdalena Bay (Mex)	600*	2 hr 24 min
Seattle	Queen Charlotte Island (Br Col)	460	1 hr 51 min
New York	Cape Sable (N S)	540	2 hr 10 min
	Bermuda (Br)	800**	3 hr 12 min

*Feasible by seaplane shuttling within the Gulf of California

**Feasible by very long range bombers or by seaplanes shuttling to tenders

United States

Army and Navy are separate entities; each having an Air Corps as component. The nation is now strengthening its defensive forces, with the objective of a future economical, balanced position in readiness, as follows:

a. Outpost line for security and the protection of initial defense forces; elements manning it, both ground and air, to be prepared for immediate action. Panama Canal Zone and Hawaii, properly strengthened, and the proposed installations in Puerto Rico and Alaska constitute this general line.

b. Main position. Elements manning it consist of the Initial Protective Force—composed of the Regular Army (less forces on outpost duty), all the Federalized National Guard and certain Reserves assigned in emergency.






The continental United States is divided territorially into nine corps areas, providing personnel for four field armies. Additional territorial military areas are the Hawaiian, Philippine, Panama Canal and Caribbean Departments, the three last-named being treated separately elsewhere. Alaska, q.v., is part of the 9th Corps Area.

Figures given below are approximate only, since at the present time both branches of the service are in process of reorganization and expansion, particularly the air components

ARMY

a. Regular Army (professional volunteer)

(1) Ground Troops (less overseas garrisons)

	4 Divisions (incomplete in part and 5 Brigades	68,500
	1 Cavalry Division	4,800
	1 Mechanized Brigade (Cavalry)	2,200
	4 Antiaircraft Regiments (mobile)	3,200
	Fortress Troops (coast artillery fixed and mobile, antiaircraft, etc.)	5,800



Service Command (depots, schools, supply, technical, etc.) 31,000



*Total, continental United States . . 115,500

(2) Overseas Garrisons (all arms) 44,000

(3) *Air Corps (including overseas detachments)—

Squadrons—

	22 Bomber
	15 Fighter

	10 Reconnaissance
	13 Observation

Total 1st line operating combat planes 1,200 ships
Training and cargo planes . . 800 ships





Personnel—

Military Pilots:


Regular Army	1,650
Reserves	850
Other ranks	20,000
	22,500

Total Regular Army 182,000

b. National Guard.

	18 Divisions (incomplete in part)	147,000
	4 Cavalry Divisions (incomplete in part)	11,500
	10 Antiaircraft Regiments (mobile)	7,000
	Fortress Troops (coast artillery fixed and mobile, antiaircraft, etc.)	5,500

Air Corps—

	19 Observation Squadrons (approx. 185 ships)
---	--

Personnel (included in totals)—

Military Pilots	300
Other ranks	1,700

Total 2,000

*Total National Guard in continental United States (171,000)

Total Regular Army and National Guard 353,000

c. Reserves.

(1) Regular Army Reserve (reservoir for filling regular units to war strength), approx.	20,000
(2) Officers' Reserve Corps (cadres for further expansion to a National Army), approx.	80,000







Total Trained Manpower 453,000

(3) A Reserve Officers' Training Corps (reservoir for the Officers' Reserve Corps) and Citizens' Military Training Camps

(potential reservoir for NCO grades in National Army) also exist.

In analyzing the above tabulations for comparison with armies of other Powers the pertinent elements of immediate combat strength within the continental limits are those starred (). Note also that the Service Command must be excluded from actual combat consideration, it is the essential "house-keeping" machinery of the Army

NAVY





	15 Battleships
	19 Heavy Cruisers
	10 Light Cruisers
	211 Destroyers
	84 Submarines
	6 Aircraft Carriers
	1 Aircraft Tender (for patrol planes)
	23 Sloops (including Coast Guard cutters)
	6 Minelayers

Personnel—

Active (including Marine Corps and Coast Guard*), approx.	141,000
Reserve, approx.	53,000
Total, approx.	194,000

Air Corps—

Squadrons—

	39 Bomber (all types, including patrol planes)
	7 Fighter
	3 Observation
	Catapulted aircraft aboard fighting ships (scouting and spotting)

Naval Districts

Total 1st line operating combat planes (approx) . . . 1,100 ships

Utility (schools, training, cargo, etc.), approx. . . . 400 ships

Naval Pilots (approx.), 3,500 (including active and reserve; included in totals above).




*Coast Guard in peace time is under Treasury Department, but in war time becomes a component of the Navy.

Hawaii


The Hawaiian Department is maintained to ensure defense of the Hawaiian Islands—and particularly the island of Oahu—as a great naval base, pivot of U.S. naval defense area on the Pacific.

ARMY

a U. S. Regular Army (not included in continental totals)

	1 Division	} 21,000
	1 Antiaircraft Regiment (mobile)	
	Fortress Troops (coast artillery fixed and mobile, technical, etc.)	

Air Corps—

 Elements of U. S. Army Air Corps q. v.
b. Reserves.

2 Regiments (National Guard; not included in continental totals) 2,000

Total approximate strength 23,000

Caribbean Area

Canal Zone

The Panama Canal Department is one of the integral territorial subdivisions of the U. S. Army. It exists to protect the Panama Canal, which is the vital by-pass by which its battle fleet may be easily shifted from Pacific to Atlantic or vice versa. Were it not for the Panama Canal the United States could not adequately ensure its naval protection without a two-ocean navy—that is, by doubling its present strength

in battleships and all the other necessary components to maintain a fleet in being, which is the essence of sea power, in each ocean. The Panama Canal is an outstanding example of the suppression of a natural barrier to facilitate defense, as mentioned in the introduction. Without the canal United States vessels must take the long sea lane around Cape Horn to move from one ocean to the other.

ARMY

U. S. Regular Army (not included in totals of U. S. q. v.)



1 Brigade, reinforced (incl. 1 regt. F. A.)



Fortress troops (coast artillery, fixed anti-aircraft, technical, etc.)



1 Antiaircraft battalion (mobile)

Approximate strength
..... 12,000

Air Corps—

Elements of U. S. Army Air Corps q. v.

Note—Strength as given above is to be increased in the near future.

Puerto Rico

The newly established Caribbean Department will be based on Puerto Rico. Existing forces are—

b. *National Guard*



2 Regiments approx. 2,000

ARMY

a. *U. S. Regular Army* (not included in totals of U. S. q. v.)



1 Regiment approx. 1,000

Total present strength 3,000

Note—When this department is completely organized it will contain sufficient elements of all arms to protect a naval base, also being organized at the present time, sealing the Caribbean and constituting the advance protection to the Atlantic side of the Panama Canal.

Cuba

Armed forces are under control of National Defense Department. Military service is compulsory by law, but in fact is voluntary.

ARMY

a. Regular Army.



4 Battalions



6 Cavalry Squadrons



1 Field Artillery Battery



Fortress troops (including coast artillery, etc.)



2 Squadrons, all types

} 8,000

b. *Rural Guard*—national constabulary 6,000

Total 14,000

c. *Military Reserve Corps* 48,000

Total trained men 62,000

NAVY



2 Light Cruisers (rehabilitated 1937)

9 Gunboats (old)

Personnel 2,200

Haiti

Defense forces negligible.

Dominican Republic

Defense forces negligible.

Foreign Possessions

Garrisons of foreign possessions in the Caribbean area are negligible. Geographically, however, as will be seen on the map, these possessions offer potential

advance bases which, in the hands of an aggressor nation, might become stepping-stones for thrusts at the Panama Canal.

Approximate Scale of Miles
500 0 500

Legend:
 - Bombing Time-Range
 - Mountains
 - Rivers
 - International Boundary
 - Naval Base

Text Box:
 Trinidad (Bol.) Commands all Pacific coastal North-South and the Central East-West Commercial Airlines.
 Natal (Brazil) Commands all Atlantic coastal North-South Commercial Airlines.

South America

The so-called A B C nations—Argentina, Brazil and Chile—are the most important national entities.


Argentina


Army and Navy are separate entities, with Air Corps component in each. The nation is divided into six military areas.


ARMY


(Conscript with professional cadres)


a. Regular Army.

 6 Divisions (skeletonized) 24,000

 4 Cavalry Brigades 5,600

 1 Antiaircraft Arty. Battalion 500

 Fortress troops (including engineers, technical, etc.) 16,000

 8 Squadrons—all types...120 ships*

2nd Line planes (training and obsol.) 300 ships

Total 420 ships

Military Pilots 200

Other ranks 1,800

2,000

Total 48,100

b. Reserves**

5 Divisions, furnished from—

Gendarmerie 3,000

Regular Army reserve 5,000

National Guard 150,000

Territorial reserve 75,000

233,000

Total War strength 281,100

* Best air force in South America.

** Note—This reserve also furnishes sufficient strength to put regular army units on war footing.

NAVY*



2 Battleships (plus 4 old coast defense vessels)



2 Heavy Cruisers



1 Light Cruiser



10 Destroyers



3 Submarines

10 Mine-sweepers

6 Squadrons—



3 Fighter



1 Observation



1 Light Bomber



1 Patrol Plane

approx.
50 ships**



Coast Artillery

Naval personnel 15,000

Naval personnel reserve ..100,000

Total 115,000.

* Best South American Navy.


** See note under Army Air Corps.

Bolivia

ARMY

(Conscript with professional cadres)

a. Regular Army.

 6 Divisions (including 1 cavalry regiment each)

Units are skeletonized to peace strength
total of 5,000

Reserves exist on paper to fill above to a
war strength of approx. 70,000

b. Air Corps—negligible.

NAVY

None.


Brazil


Army and Navy are separate entities; Air Corps is component of each. The nation is divided into nine military areas.


ARMY

(Conscript with professional cadres)


a. Regular Army.


 5 Divisions and 1 mixed brigade. .41,000

 3 Cavalry Divisions 9,000

 Fortress troops (including coast artillery, technical, etc.)10,000

Total peace strength60,000

 12 Squadrons, all types (includes Naval)214 ships

 1 Antiaircraft Arty. Group, prepared for wartime expansion to 3 regiments (included in Army above).

b. Reserves.

(1) Organized (mobilizable in M + 60, to expand above forces)161,000

Total Regular Army war strength221,000

(2) State forces (militia)

Active 32,000

Reserve 32,000


64,000


National War strength ... 285,000


Potential man power, additional but untrained1,720,000

NAVY

 2 Battleships

 2 Light Cruisers

 8 Destroyers (plus 5 obsolete)

 3 Submarines (plus 1 obsolete)

Several smaller vessels.

Personnel—

Active 14,000

Reserve 15,000

Total 29,000

Chile

Army, Navy and Air Army are separate entities.

ARMY

(Conscript with professional cadres)

a. *Regular Army.*



4 Divisions (skeletonized)



1 Cavalry Division



Fortress troops (except coast artillery)

Carabineros (national constabulary—17,000)

Peace strength 37,000

War strength 196,000

AIR ARMY



9½ Squadrons, all types, including 2 squadrons of flying boats, 1 of amphibians ... approx 100 ships.

Military Pilots 160

Other ranks 1,200

Reserves 800

Antiaircraft defense is a responsibility of Air Army.

NAVY



1 Battleship



8 Destroyers



10 Submarines

Various obsolescent vessels.

Naval personnel 6,500



Coast Artillery (part of Navy) 1,200

Total 7,700

Colombia

Army and Navy are under a single command. The nation is divided into six military zones.

ARMY

(Conscript with professional cadres)

a. *Regular Army.*



6 Brigades (reinforced with Cav. and F. A. units)



90 ships of all classes

Peace strength 16,000

War strength 30,000

b. *Reserves*—estimated 400,000

NAVY



2 Destroyers

4 Gunboats (3 river boats)

Several smaller vessels.

Note—Colombian Army is now in process of reorganization.

Ecuador

ARMY

(Conscript with professional cadres)

a Regular Army.

	4 Brigades	} Peace strength 7,500 War strength 48,000
	1 Cavalry Regiment	

b. Reserves.

Sufficient on paper to fill above to war strength.

c Air Corps—negligible.

NAVY

 1 Cruiser.

Note—Situation of the capital, Quito, in an Andean valley 9,500 feet above sea level, is a difficult one for any hostile bomber.




Paraguay

Army and Navy are separate entities. While the force detailed below is small, it must be remembered that Paraguay has but lately concluded a successful war with Bolivia, and that its trained man-power is high in proportion to its population. It is estimated that the regular army units listed below could be expanded by M + 30 to four divisions.

ARMY

(Conscript with professional cadres)

a Regular Army

	4 Regiments	} Peace strength 3,000
	1 Cavalry Regiment	
	2 Field Artillery Groups	

b. Reserves approx. 94,000

War strength 97,000

c. Air Corps—negligible.

NAVY






2 gunboats, 2 tugs. Negligible.

Peru

Army and Navy are separate entities, with Air Corps a component of the former.

ARMY (Conscript with professional cadres)

a Regular Army.

	6 Divisions (skeletonized)	} Approx. 80 ships
	1 Cavalry Regiment	
	1 Antiaircraft Arty. Battery	
	6 Squadrons—	
	1 Reconnaissance	}
	5 Training	

Peace strength 12,000

b. Republican Guard 1,000


c. Civic Guard 3,500

Total Peace strength 16,500

d. Reserves.

Supposedly sufficient trained to fill above units to war strength, approx. 100,000.

NAVY

 2 Light Cruisers

 2 Destroyers

 4 Submarines

Some smaller vessels.

These vessels are all obsolete.

Naval personnel 2,500

Uruguay

Army and Navy are controlled by Ministry of National Defense. The nation is divided into four military zones.

NAVY

Negligible.

ARMY

(Volunteer professional)

a. Regular Army.



4 Divisions



2 Cavalry Brigades

Air Corps—negligible

Peace strength, skeletonized 8,000

b. Reserves.

In time of war military service is compulsory. Time necessary to fill above cadres to war strength is problematical.

Venezuela

ARMY

(Conscript with professional cadres)

a. Regular Army.



9 Brigades



1 Cavalry Regiment



Fortress troops (coast
tillery, etc.)

4 Squadrons—



1 Fighter



2 Bombers

} Approx.
30 ships

} Peace strength
..... 6,000

b. Reserves.

Exist on paper to fill above to war
strength of 50,000

NAVY

5 gunboats—negligible.

